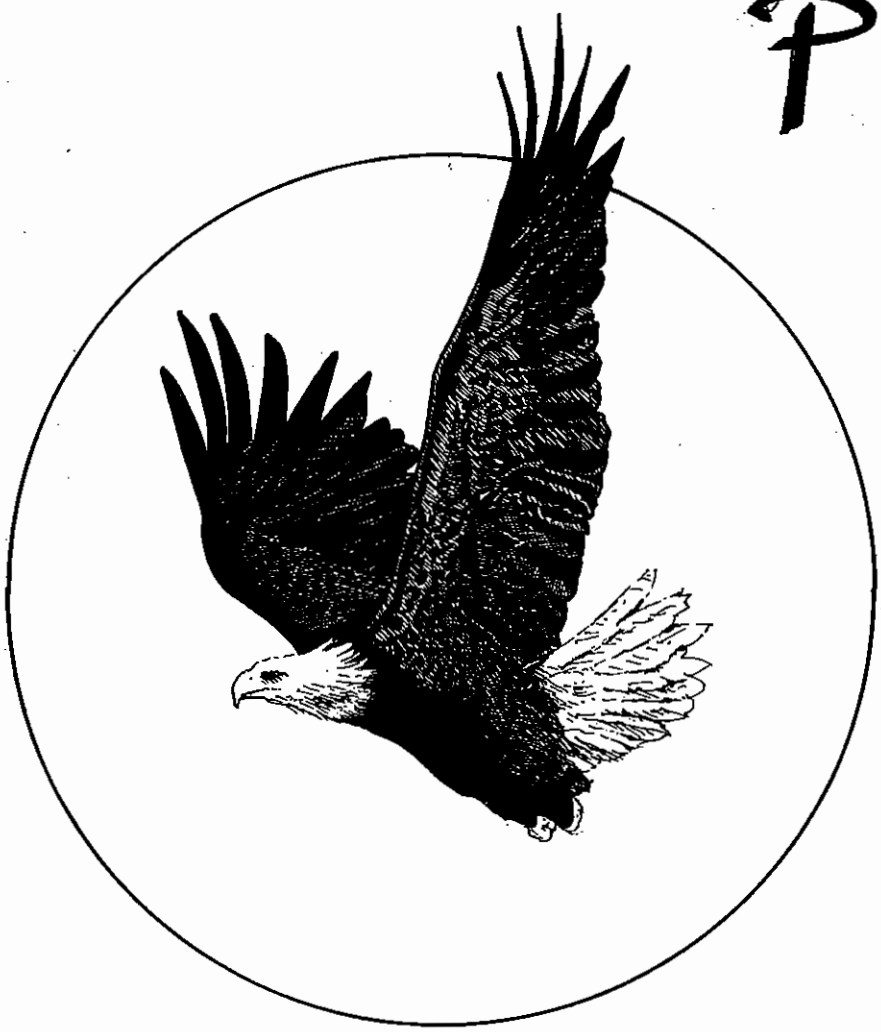

WELLS WILDERNESS TECHNICAL REPORT

Bureau of Land Management
Elko District
Wells Resource Area
Nevada
April
1983

WELLS WILDERNESS TECHNICAL REPORT

BUREAU OF LAND MANAGEMENT
ELKO DISTRICT
WELLS RESOURCE AREA
NEVADA

APRIL, 1983

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Acronyms

BLM	Bureau of Land Management
BM	Bureau of Mines
DLE	Desert Land Entry
GEM	Geology, Energy, Minerals
IMP	Interim Management Policy
MRI	Mineral Resource Inventory
NDOW	Nevada Department of Wildlife
NPS	National Park Service
RA	Resource Area
RMP	Resource Management Plan
ROW	Right-of-Way
SMSA	Standard Metropolitan Statistical Area
SRUP	Special Recreation Use Permit
USFS	United States Forest Service
USGS	United States Geological Survey
WMP	Wilderness Management Policy
WSA	Wilderness Study Area

For Glossary, References and List of Preparers see Wells RA RMP.

Our special thanks to: Bonnie Martiartu for typing (Elko District Office)
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I. INTRODUCTION

The Wells Resource Area Wilderness Technical Report (a supplement to the Wells Resource Management Plan (RMP)) addresses the Criteria and Quality Standards listed in the Wilderness Study Policy dated February 3, 1982. In addition, this report analyses impacts by wilderness study area for the No Action, Resource Production, Midrange, Resource Protection and the Preferred Alternatives in the Wells RMP.

II. WILDERNESS CHARACTERISTICS

Multiple Resource Benefits

In all of the four WSAs, several other resource benefits would result from wilderness designation. All of these are a consequence of preserving the areas in their natural condition. These are:

A. Watershed and Water Quality - Development of water sources would be limited by the Wilderness Management Policy dated September 1981, as would developments (other than mining) that would impact the watershed.

B. Air Quality - All designated wilderness areas would maintain Class 2 air quality classification (unless changed by the state).

C. Wildlife -

1. Since animal damage control programs are limited to removing only offending individuals, non-target animals such as the kit fox would not be killed.

2. Preserving the areas in their present natural state results in the preservation of habitats for most species. Seedings that would create monotypical habitat would be disallowed. Maintenance of the natural environment would also result in keeping disturbances of sight and sound to a minimum.

3. The use of pesticides, herbicides, and other poisons and pollutants will normally be prohibited. This will prevent adverse biological consequences that are often caused by introduction of these substances into the food chain.

D. Recreation and Visual Resources -

1. Designation would help protect the scenic quality of the areas because of the restrictive wilderness management policy.

2. Designation would give legislative protection for important sites within the areas such as bristlecone pine forests and raptor nesting areas.

3. Designation would help maintain areas in a natural condition, thereby preserving opportunities for primitive recreation.

4. If pinyon-juniper areas are allowed to burn, the ungulate populations would increase, benefitting hunting and viewing opportunities (except for the Bad Lands WSA). The increase would result from the burning of pinyon-juniper cover, and the resulting growth of pre-climax vegetation types, such as bitterbrush and serviceberry, that are desirable wildlife forage.

E. Cultural Resources - Wilderness designation will offer protection for archaeological resources - both known and potential - by limiting access. Wilderness users could, if properly educated, contribute information by reporting site locations where a survey has not taken place.

F. Forestry - Since the Wilderness Management Policy prohibits the cutting of trees (except in special circumstances), uncommon species such as white fir and bristlecone pine would be protected by wilderness designation.

G. Threatened and Endangered Species - No sensitive plant species have been located in any of the WSAs, but based upon their identification in adjacent or nearby areas, such plants could exist in the areas. Designation would protect for these plants from development and resource production activities.

Designation will bring protection these plants from development and resource activities.

III. MANAGEABILITY

There are no generally applicable points under this criterion.

IV. ENERGY AND MINERAL RESOURCES

A mineral survey will be conducted by the U.S. Geological Survey/Bureau of Mines (USGS/BM) for all WSAs recommended as suitable by the Secretary of the Interior.

Minerals information utilized in this report was taken from the Draft Geology, Energy, and Minerals (GEM) Report prepared by TERADATA (for the Bad Lands WSA) and the Great Basin GEM Report Venture (for the Bluebell, Goshute Peak and South Pequop WSAs). These publications are available upon request by contacting the Elko District Bureau of Land Management at 2002 Idaho, Elko, Nevada, 89801 (702-738-4071).

V. IMPACTS ON OTHER RESOURCES

A. Unaffected Resources

1. Climate - Recommending an area as either suitable or nonsuitable for wilderness designation would not affect the climate of the region.

Explain clearer

2. Air Quality - The air quality rating for the Wells Resource Area, including all of the WSAs, is Class II. This classification would not change due to designation of an area as wilderness, unless the state initiated such action. This would require an additional environmental assessment prior to redesignating an area Class I.

3. Fire Management - The Interim Fire Management Plan for the district includes a decision to control wildfires in WSAs without impairment of the area's suitability for wilderness preservation. This is in conformance with the Interim Management Policy and Guidelines for Lands Under Wilderness Review (IMP Guidelines), dated December 13, 1979.

how many WHS?

4. Wild Horses - Less than 8.3 percent of the wild horses in the resource area use land within the boundaries of the WSAs. Wilderness designation of this small portion of the wild horse use area would not be significant. Management actions needed to implement any Wild Horse Herd Management Area Plans would be allowed subject to the limitations described on page 25 of the Wilderness Management Policy.

5. Saleable Minerals - There are sufficient quantities of saleable minerals (sand, gravel, building stone, etc.) outside the boundaries of WSAs to meet all foreseeable demands.

6. Desert Land Entry Application - There is a sufficient amount of acreage outside the WSA boundaries to meet all foreseeable future DLEs.

7. Utility and Transportation Corridors - Generally, future utility and transportation corridor needs could be accomodated outside the boundaries of the WSAs.

B. AFFECTED RESOURCES

to who?

1. Recreation will experience several negative impacts in all areas that become wilderness:

   a. Designation will result in an increase in recreation use. This may result in crowding at destination points such as springs, streams, caves, mountain tops, and ridge lines.

   b. Recreational use will be restricted by the prohibition of contests and competitions.

   c. Outfitters and guides will be under much closer scrutiny in a designated wilderness than outside, and will be required to file for Special Recreation Use Permits (SRUP), even though the requirement technically exists for all outfitter services on public lands. The increased paperwork necessitated by more intense management will have an adverse effect on the outfitters and guides when compared to present management.

significant

2. Ranching interests in wilderness areas may experience some adverse impacts if the operator is required to use horses for activities that had previously been performed by motorized vehicle.

3. The harvest of woodland products would be impacted in every WSA except Bad Lands. Christmas tree and post and pole cutting would be prohibited as would cutting of fuelwood for use outside the wilderness area. Commercial pinenut gathering would also be disallowed.

4. The cultural resources program may experience some negative impacts from wilderness designation. Motorized access to and development of cultural sites for educational purposes would generally not be allowed. Costs of conducting archaeological research may increase, since new roads could not be built, and laboratory and living quarters would be located outside of the wilderness areas. Also, increased visitation associated with designation could cause primary and secondary adverse impacts to cultural resources since locations used by earlier inhabitants are those same locations which would be used by recreationists.

VI. IMPACTS OF NONDESIGNATION ON WILDERNESS VALUES

Increasing pressure is being placed on the land in the Elko District by oil and gas exploration companies. So far, this pressure has been concentrated on several valley areas but it is also extending into the bench lands and lower mountains. The impacts of individual exploratory operations range from almost none to severe. The cumulative impacts of many such operations in one area could profoundly affect the naturalness of the area.

This general trend of increasing pressure is almost certain to continue, with temporary anomalies due to fluctuations in oil prices and supplies. Nondesignation of wilderness study areas would open these lands to normal exploratory practices, which could severely damage the mandatory wilderness characteristics of naturalness. The damage could remain indefinitely in the dry climate of northeastern Nevada.

Exploration may culminate with drilling. Drilling can obviously affect naturalness, but can also impact opportunities for solitude; the quality of opportunities for primitive recreation, and features of scientific, educational, scenic, or historical value which serve as special wilderness features. Drilling can just as logically occur in mountains as in valleys, except that the operator must pay the additional road-building costs associated with mountain drilling.

Nondesignation would leave wilderness study areas open to mineral location, which could progress to full-scale mining. The early stages of mining activities allowed under the 43 CFR 3809 regulations would have impacts very similar to those resulting from drilling, and could ultimately create far greater impacts.

The impacts on naturalness caused by energy and mineral exploration and

extraction are usually subtle and cumulative. This explains the reaction of many publics who question the need for wilderness designation. Impacts to the land are generally unnoticeable to the casual observer because of their accretive nature, and this leads to the assumption that the lands are self-protecting. However, they are not self managing.

If not designated as wilderness, all WSAs except Bad Lands would be made available for fuelwood and Christmas tree cutting. The impacts from these activities would vary, depending on the frequency and intensity of harvest. Impacts would likely be minor in the South Pequop WSA but would be more significant in the Bluebell and Goshute Peak WSAs, as they are much more accessible and closer to population centers.

VII. WILDERNESS STUDY

AREA

ANALYSIS

BLUEBELL WSA

The Bluebell Wilderness Study Area is located about 95 miles east of Elko and 10 miles west of West Wendover, Nevada in the Goshute Mountain Range (see Location Map, Wells RMP). The WSA is mountainous with numerous densely forested hills and drainages. Uses of the area include harvesting woodland products, livestock grazing, mineral exploration and recreation.

Table 1 shows the acres of the Bluebell WSA preliminarily recommended as suitable and nonsuitable for wilderness designation by alternative.

Table 1

Bluebell WSA

	Resource Protection	Midrange & Preferred	Resource Production	No Action
Suitable Acres	55,665	48,308	25,830	-0-
Nonsuitable Acres	-0-	7,357	29,835	55,665
% of WSA suitable	100	86.8	46.4	-0-
% Wells RA suitable	1.3	1.1	0.6	-0-

Criterion No. 1: Evaluation of Wilderness Values

Wilderness values i.e., naturalness, outstanding opportunities for solitude and primitive and unconfined recreation, and special features would be maintained on approximately 48,308 acres and lost on approximately 7,367 acres over the long-run (see Criterion No. 2: Manageability) with wilderness designation under the Midrange and Preferred Alternatives.

Component No. 1: Quality of the Area's Mandatory Wilderness Characteristics

A. Naturalness

The 55,665 acre WSA contains ten reservoirs (these are generally dry and are formed by earthen mounds about 10 feet x 10 feet x 30 feet), twenty miles of ways, four corrals, a mile long fence, and two developed springs. All of these impacts are the result of livestock management both outside and inside the WSA. The ways, occassionally utilized by recreationists and miners working and staking claims in the area, would be closed with designation and are expected to rehabilitate naturally over time.

The cherry-stemmed roads (see Map 1) are hardly visable from within the WSA. They are also so infrequently traveled that seeing or hearing a vehicle on them would be rare. Therefore, these routes are not recommended for closure and rehabilitation under any of the RMP alternatives.

B. Outstanding Opportunities for Solitude and Primitive and Unconfined Recreation

1. Solitude

The 55,665 acre WSA is about the size of the majority of existing wilderness areas. It is generally oblong and measures about 12 miles by 7 miles.

The topography of the WSA is comprised of the rugged Goshute Mountains bordered on both the east and west by low rolling foothills. The mountainous portions of the WSA range from 6200 to 8000 feet elevation and comprise about 45,665 acres, whereas the foothills comprise 10,000 acres and range from 5300 to 6600 feet. The WSA contains hundreds of small canyons (1/4 - 1/2 mile long) and about 15 larger drainages (2 to 4 miles long).
The vegetative screening in the unit is considered outstanding because of the amount, distribution, and variety of vegetative species present. Rocky mountain and Utah juniper, pinyon, bristlecone and limber pine, white fir, mountain mahogany and serviceberry are among the species present (see Table 3).

Because of the excellent topographic and vegetative screening there are many areas where people can find a secluded spot throughout the WSA. This is particularly true in the major drainages such as West Morris, Morris, and Morgan Basin, and Thirtymile, Johnson, Rosebud, and Erickson Canyons.

From eastern facing ridgelines trains on the Western Pacific railroad tracks, vehicles on Interstate 80 and Alternate Highway 93, and the communities of Wendover, Utah and West Wendover, Nevada are visable, but cannot be heard. These sites range from 6 to 15 miles from recreationists in the WSA and slightly diminish the benefits of wilderness designation to the user. Low flying military aircraft can also be seen and heard from inside the WSA. These outside impacts are not considered significant and, therefore, none of the WSA is recommended as nonsuitable for these reasons.

2. Primitive and Unconfined Recreation

Activities available in the WSA include backpacking/camping, hiking, horseback riding, hunting, wildlife observation, sightseeing/photography, rock climbing, and fossil collecting.

Backpacking/camping: Many canyons provide areas for camping and most of these have forested areas for shelter. The ridgeline of the Goshute Mountains offers excellent backpacking in the WSA. Parties should camp off the ridge to gain shelter from the elements. Generally, a trip of several days would be required to enjoy much of the unit. Water is not readily available and should be carried. Game trails provide good access throughout much of the WSA.

Hiking: Most canyons in the unit are about three to four miles long and provide excellent day hiking. Generally, the terrain is easy for foot travel until the upper reaches of the canyons are attained and the slope becomes steep. Shelter from the elements can easily be found because of the forested condition of the WSA. Springs located in lower elevations on the east side of the unit provide sufficient amounts of water for foot travelers, however, it is highly recommended that water be carried as they can be difficult to locate.

Horseback Riding: The unit's large size and diverse topographic relief enhance horseback riding. A major drawback, however, is the general lack of water in much of the WSA. Springs do provide water at lower elevations.

Hunting: Fair hunting success can be expected for mule deer and chukar even though the topographic and vegetative screening do hinder hunting. Portions of the WSA are considered as both winter and yearlong habitat for mule deer. Table 2 displays deer hunting information for hunting management unit 106 which includes the Bluebell and Goshute Peak WSAs.

Bluebell WSA
Table 2
Mule Deer Hunter Days (General Season)

Hunting Unit	1981	1980	1979	1978	1977
Management Unit 106 includes Bluebell and Goshute Peak WSAs	31(a) 166(b)	21 106	24 121	19 68	15 50

(a) = Number of hunters.
(b) = Days spent hunting.

Source: Nevada Department of Wildlife (NDOW), 1982.

Wildlife Observation: Raptor viewing is considered excellent in the WSA. In September and the first half of October of each year about 5000-6000 raptors migrate south over the ridgeline. Other animals to be observed include wild horses, mule deer, small birds and mammals (see Table 4).

Sightseeing/Photography: These activities are excellent as the topographic diversity and forested condition of the WSA make excellent photographic subjects. Other subjects include rocky cliffs, natural arches and archaeological sites.

Rock Climbing: There are a number of areas in the WSA which include limestone faces from 30 to 150 feet high. These would provide generally fair practice areas for the technical climber. Many areas of interest to the rock scrambler can also be found in the WSA.

Fossil Collecting: Abundant invertebrate fossils are found weathering out of the limestones and shales. Fossils are most commonly found in freshly eroded areas near roadcuts, cliffs and ephemeral streams. Recorded specimens collected from these areas included spriferid, atrypid, rhynchonellid, and productid brachiopods. Mollusks found include platyostomes, polygyras, crepidula, and ammonities. These fossils are valuable to the scientific community as well as to the amateur collector.

Component No. 2: Special Features: Quality of the Area's Optional Wilderness Characteristics

Ecological: The diversity of the flora and fauna in the Bluebell WSA are considered unique ecological features. The eastern portion of the area is densely vegetated and contains a number of plant species not found on the more arid western side. Table 3 is a listing of the flora in the WSA while Table 4 displays the fauna.

Of further importance is the fact that a communal bald eagle wintering roost site has been discovered in the Goshute Peak WSA immediately south of the Bluebell WSA. Such roosting areas for the threatened and endangered species greatly enhance the wilderness value of an area.

The Goshute Mountains (Bluebell and Goshute Peak WSAs) are also the location of a yearly southern migration from late August to mid-October of about 5000 - 6000 raptors. Raptors known to migrate through the area include golden and bald eagles, redtailed hawks, goshawks, American kestrals and Cooper's hawks. Steve Hoffman, a biologist with the U.S. Fish and Wildlife Service, has trapped and observed raptors in the Goshute Mountains for the past four years. He feels that the area is the most productive ridge site for raptor migrations in the west.

The area is also historical range for bighorn sheep. Studies are currently in progress by the Nevada Department of Wildlife (NDOW) to evaluate the reintroduction potential of this area. It is believed the Goshute Mountains could support approximately 200 sheep.

Geological: In the Bluebell WSA Paleozoic rocks are exposed having a cumulative thickness of over 20,000 feet. These rocks were deposited in marine seas on a continental shelf from 550 to 270 million years ago. Limestone, often highly fossiliferous, is the dominant rock type, with lesser amounts of dolomite, shale, quartzite, and conglomerate. In a few areas Tertiary volcanic rocks, chiefly rhyolite and dacite, overlie the Paleozoic rocks.

Fossils are generally intertebrates, with a large variety of brachiopods, corals, bryozoans, and trilobites to be found. A number of rare and unusual fossil species occur in the WSA.

Because of the limestone within the mountains it is believed there are caves within the WSA. A few shelters have been found but no caves have been discovered.

The WSA also contains ~~at least~~ two arches. The largest is located in section 11 of T. 32 N., R. 68 E. It is about six feet thick and has an opening about eight feet wide and five feet high. Since the arch faces northeast, one has an excellent panoramic view of the Salt Flats which greatly enhances the scene. Pilot Peak, the highest peak in the Wells RA, can also be seen through the arch to the north.

Scenic Value: From atop the ridgeline of the Goshute Mountains, the Wasatch and Deep Creek Mountains of Utah can be seen, as well as the Salt Flats, Pilot Peak and the Pequop, Cherry Creek, East Humboldt and Ruby Mountain Ranges. Vistas of up to 100 miles to the Wasatch Mountains greatly enhance the feeling of isolation in the WSA. These vistas coupled with the diversity in vegetation, wildlife, and rock banding, combine to make the Bluebell WSA exceptional in scenic quality. The twisted trunks of bristlecone pine trees make excellent photographic subjects in the daytime as do their silhouettes in the evening.

Archaeological: ~~Because of the great expense involved, only~~ about one percent of the Wells Resource Area lands have been inventoried for archaeological resources. From this inventory 11 aboriginal and two historic sites are known to exist within the WSA. These sites contain typical Great Basin artifacts including projectile points, flakes, mano and metate fragments, pottery sherds, burned bone, drills, bifaces etc. One site appears to be of National Register of Historic Places significance. Red Hand Cave, containing red pigmented pictographs, is located about one mile outside the WSA and is one of only four known sites in Elko County containing pictographs. It is possible that other pictographs are located in the Goshute Mountain Range.

The site inventory data available was used to make statistical projections of archaeological site totals for the WSA. These projections indicate the presence of about 800 open aboriginal, 60 rock shelters, and 40 historic sites within the WSA. It should be emphasized that these projections do not take into account differential site density for different kinds of terrain and environmental settings. For example, pinyon-juniper woodlands, important resource areas in prehistoric times,

Bluebell WSA

Table 3

FLORA

Grasses
Bluebunch Wheatgrass
Sandberg's Bluegrass
Downy Brome
Junegrass
Idaho Fescue
Indian Ricegrass
Squirreltail
Needle-and-Thread
Nevada Bluegrass
Big Bluegrass
Sand Dropseed
Basin Wildrye

Trees
Pinyon Pine (single leaf & nut)
Utah Juniper
Rocky Mtn. Juniper
Curlleaf Mtn. Mahogany
White Fir
Bristlecone Pine
Western White Pine

Forbs
Sandwort
Phlox
Sedge
Broomrape
Dusty maiden
Locoweed
Stickseed
Hood's Phlox
Tansymustard
Stoneseed
Groundsel
Arrowleaf Balsamroot
Rockcress
Daisy
Biscuitroot
Penstemon
Indian Paintbrush
Bluebells
Cryptantha
Longleaf Phlox
Deathcamas
Hawksbeard
Stonecrop
Bastard toadflax
Halogeton
Russian Thistle
Globemallow
Pricklypear Cactus
Pricklygilia
Hooker Balsamroot
Strawberry
Goldenrod
Skeletonweed
Mustard

Shrubs
~~Black~~ Sagebrush
Cliffrose
Big Sagebrush
Winterfat
Little Rabbitbrush
Little Horsebrush
Low Sagebrush
Shadscale
Greasewood
Bud Sagebrush
Green Molly
Spiny Horsebrush
Sulfur Buckwheat
Spiny Hopsage
Nevada Mormontea
Serviceberry
Snakeweed
Nattall's Saltbrush
Matted Buckwheat
Rocky Mtn. Maple

Bluebell WSA
Table 4

FAUNA

Birds
Chukar
Red-tailed Hawk
Say's Phoebe
Burrowing Owl
Golden Eagle
Marsh Hawk
Common Raven
American Kestral
Lazuli Bunting
Mourning Dove
Purple Finch
Blackbilled Magpie
Western Meadowlark
Rufous sided Towhee
Rock Wren
Mountain Bluebird
Mountain Chickadee
Bald Eagle
Prairie Falcon
Common Flicker
Broad-winged Hawk
Cooper's Hawk
Goshawk
Sharp-shinned Hawk
Swainson's Hawk
Gray-headed Junco
Ruby-Crowned Kinglet
Clark's Nutcracker
Red-breasted Nuthatch
White-breasted Nuthatch
Osprey
Great Horned Owl
Chipping Sparrow
Violet-Green Swallow
Vaux Swift
Whitethroated Swift
Hermit Thrush
Turkey Vulture
Broad-tailed Hummingbird
Pinon Jay
American Robin
Townsend's Solitaire
Cliff Swallow
Rock Wren
Common Nighthawk
Brewer's Sparrow
Sage Thrusher
Indigo Bunting
Black-throated Sparrow
Green-tailed Towhee
Merlin

Reptiles
Western Fence Lizard
Desert Horned Lizard
Sagebrush Lizard
Collard Lizard
Gopher Snake
Striped Whipsnake
Western Rattlesnake
Great Basin Skink

Mammals
Bighorn Sheep
(Potential)
Bushy-tailed Woodrat
Mule Deer
Proghorn Antelope
Least Chipmunk
Coyote
Mountain Lion
Golden Mantled Ground
Squirrel
Uinta Chipmunk
Long-tailed weasel
Yellow-bellied weasel
Pygmy Rabbit
Bobcat
Idaho Ground Squirrel
Desert Woodrat
Cliff Chipmunk

could be expected to have a higher site density than open areas dominated by big sagebrush, grasses, and other plants on the valley floors and adjacent alluvial fans and bajadas. Likewise upland areas are more likely to contain rock shelters suitable for human occupation, or to have been the scene of historic mine related activities. WSAs have a higher percentage of these conditions than the total resource area, upon which the projections are based.

The WSA has a long history of human occupation as is indicated by the excavation of Danger Cave at Wendover, Utah. This shelter is one of the major archaeological sites excavated in the Great Basin. The earliest occupation was Carbon 14 dated to 10,200 year B.P. Occupation continued almost continously up to the historic period.

The earliest occupants of this area were probably big game hunters who exploited the now extinct megafauna such as mammoth, giant bison, and camels. The evidence for these early hunters presence is based on two possible folsom points recovered from Danger Cave.

Most of the material from Danger Cave dated to the Archaic Period (ca. 10,000 - 1500 years ago). These peoples were hunters and gatherers who subsisted mostly on seeds, roots and rodents supplemented by hunting for bighorn sheep, antelope and deer. The material culture of this period was relatively poor compared to other portions of the country because of their semi-nomadic life style, but what materials they did have were finely adapted to successfully exploiting the harsh environment of the region. Hallmarks of the archaic period are the milling stone and well made basketary.

The Fremont culture occupied most of Utah and extended slightly into eastern Nevada from about A.D. 500 to 1300. These peoples exhibited a number of Puebloan features including masonry and adobe structures, plainware, corrugated and printed pottery and some dependence on agriculture. Fremont pottery and basketry was recovered from Danger Cave. Fremont sites in the WSA would probably be limited to temporary hunting and gathering camps.

After 1300 A.D. the area was ocupied by Numic speakers who are historically known as the Goshute Shoshone. Their culture was similar to that of the archaic peoples. Inhabitants of Antelope Valley, Nevada and Deep Creek Valley, Utah are known to have hunted, trapped, and gathered pinenuts in the Goshute Range.

The history of Euro-American use of the WSA is unknown. Historic remains dating to the early 1900's including possible structures are known to exist in three locations in the Goshute Mountains. Their purpose is unknown. A mining camp is found on the west slopes of the range whereas modern hunting camps are scattered throughout. Euro-American use of the area was probably limited to short term activities such as hunting, trapping, mining exploration and wild horse gathering.

Scientific and Educational Values: The Goshute Herd Wild Horse Management Use Area includes the WSA. There are 120 wild horses in this area so a visitor who remains a day or two will usually see wild horses. Of interest also are the bristlecone pine (Pinus aristata) found in the WSA. They are the same as those found in the Wheeler Peak Scenic Area near Ely, Nevada, but are younger and smaller. These unique trees greatly enhance the visitor's experience because of their age and general appearance. The variety of plants and animals in the WSA are also of educational value.

Component No. 3: Multiple Resource Benefits: The Benefits to Other Multiple Resource Values and Uses Which Wilderness Designation of the Area Could Ensure

A. Values that already exist:

Wilderness designation would ensure that the naturalness, outstanding opportunities for solitude and primitive and unconfined recreation, special features, and other resource values in the WSA would be maintained or enhanced over time.

Wilderness designation would generally protect the archaeological resources in the WSA. Because of vehicular restrictions, access to cultural resource sites would become more difficult. This would reduce the occurence of pot-hunting and allow archaeological sites to retain their integrity for a longer period of time.

Wilderness designation would assure that wild horses would receive less harassment from vehicles. Closure of ways to vehicular access would provide more untraveled acres in which the horses could roam unmolested.

All watersheds, including the 5600 acres of high erosion potential watershed (see Map 1), would be protected from future deterioration if designation took place. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment in the development of mining claims, would be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases in sediment production.

Currently, there are approximately 22,000 acres of mule deer yearlong habitat in an unknown condition, 1,450 acres of deer winter habitat in good condition, and 5,700 acres of antelope yearlong habitat and 12,650 acres of potential bighorn sheep yearlong habitat in poor condition. These are shown on Map 2. In general, big game habitat would be protected by wilderness designation as future developments destructive to habitat would not occur and closure of ways to vehicle traffic would minimize wildlife harrassment. Wilderness designation could allow construction of guzzlers for wildlife and prescribed burns to enhance escape routes for bighorn sheep. Restricted development would be especially beneficial to lambing of bighorn sheep if they were reintroduced into the WSA.

Migrating raptors and possible roosting bald eagles would also be protected by wilderness designation because of restricted development.

Eyesores created by development such as powerlines, roads, and gravel pits would not be allowed in a wilderness area, thereby, protecting its scenic quality.

B. Values that do not now exist:

Wilderness designation would enhance the possibility of the NDOW reintroducing bighorn sheep into the southern portion of the area. NDOW has considered this action for a long time but the agency wants to be relatively sure of the sheep's protection from man before the reintroduction is made.

C. Benefits to areas outside the Wilderness Study Area.

The scenic quality of the WSA as viewed from outside the area and particularly from I-80 and Wendover, Utah would also be protected by designation.

Component No. 4: Diversity in the National Wilderness Preservation System

Factor No. 1: Expanding the diversity of natural systems and features, as represented by ecosystems and landforms.

The entire 55,665 acre WSA is within the Juniper-Pinyon Woodland ecosystem/landform as represented by the Bailey-Kuchler Ecosystems of the United States. Part A of Table 5 shows that there are parts of three existing wilderness areas in California totalling 43,168 acres in this ecosystem. Part B of the table displays those areas of this ecosystem that have been administratively endorsed as wilderness areas and are pending before congress. Part C displays the WSAs in the Juniper/Pinyon Woodland ecosystem nationwide that have potential for future designation as wilderness.

Factor No. 2: Assessing the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers.

The Bluebell WSA is about three to four hours driving time from the Salt Lake City, Utah, Standard Metropolitan Statistical Area (SMSA) and about four to five hours from the Provo, Utah, SMSA. Table 6 shows the acreage of existing wilderness areas (Part A), administratively endorsed areas (Part B), and potential wilderness areas (Part C), within five hours of these two SMSAs.

Factor No. 3: Balancing the geographic distribution of wilderness areas.

The Jarbidge Wilderness Area, located about four to five hours northwest of the Bluebell WSA, is the only designated wilderness area in Nevada. It contains 64,830 acres or .09 percent of the public land in Nevada. Currently there are about eight million acres in Nevada under consideration for wilderness designation that are either administratively endorsed as suitable or slated for further study. This represents approximately 7.5 percent of the federally administered lands in Nevada.

Table 5

ECOSYSTEM/LAND FORM REPRESENTATION

EXISTING REPRESENTATIONS IN STATUTORY WILDERNESS

A. Ecosystem/Landform

No.	Name	BLM AREAS			OTHER AGENCY AREAS		
		No. Areas	Acres	Agency	No.	Acres	Stat
3130-21	Juniper/Pinyon Woodland	None	None	USFS	3	43,168	CA

AREAS ADMINISTRATIVELY ENDORSED

B. Ecosystem/Landform

No.	Name	BLM AREAS			OTHER AGENCY AREAS		
		No. Areas	Acres	Agency	No.	Acres	Stat
3130-21	Juniper/Pinyon Woodland	None	None	USFS	4	52,640	CA
					1	60,000	NV
					1	17,530	VT
				NPS	1	35,000	NV

POTENTIAL WILDERNESS AREAS
(Other Study Areas)

C. Ecosystem/Landform

No.	Name	BLM WSA			OTHER AGENCY AREAS		
		No. Areas	State	Acres	Agency	Acres	State
3130-21	Juniper/Pinyuon Woodland	19	CA	319,864	USFS	433,384	CA
		14	UT	233,500		105,828	NV
			NV	1,635.576			

Table 6

Proximity to Population Centers

A. Statutory Wilderness Within One Days Travel Time of Identified Population Centers

SMSA	State	BLM No.	Acres	Other State	Agency No.	Acres
Salt Lake		None		ID	1	43,243
				UT	1	30,088
Provo		None		UT	1	30,088

B. Administratively Endorsed Areas Within One Days Travel Time of Identified Population Centers

SMSA	State	BLM No.	Acres	Other State	Agency No.	Acres
Salt Lake		None		CO	1	205,671
				ID	1	15,770
				UT	17	1,207,346
Provo		None		CO	2	219,513
				ID	1	15,770
				UT	23	1,460,047

C. Potential Wilderness Areas Within One Days Travel Time of Identified Population Centers

SMSA	State	BLM No.	Acres	Other State	Agency No.	Acres
Salt Lake	CO	3	38,885	ID	2	140,050
	ID	11	573,975	UT	6	141,886
	NV	4	201,625	WY	1	135,840
	UT	30	1,347,618			
	WY	10	140,432			
Provo	CO	7	153,875	ID	1	28,800
	ID	2	11,338	NV	3	235,141
	NV	6	279,525	UT	7	767,816
	UT	45	1,600,901			
	WY	6	108,682			

Criterion No. 2: Manageability

The Bluebell WSA would be managed primarily to provide opportunities for primitive recreation and solitude. If it were designated as wilderness, emphasis would be placed on opportunities for primitive recreation on the ridgeline of the Goshute Mountains, where use would be concentrated. Opportunities for solitude would be stressed for the more diverse canyon and basin areas below the ridgeline.

The WSA is a solid block of public land. There are no private inholdings, state lands, or rights-of-way contained within its border. Currently, 49 mining claims covering about 980 acres, 9 oil and gas leases comprising 9600 acres, and 3 Desert Land Entry, (DLE) applications covering approximately 340 acres are located generally on the perimeter of the WSA (see Map 3). No discoveries of ore have been reported and no drilling has taken place.

Map 1 depicts the roads and ways in the WSA. The border roads, including Morgan Pass Road, and R-2 and 3, and W-6, 7, 8, 14, 15, 16, and 17 are used for vehicular access to mining claims and oil and gas leases. All roads would remain open for all publics to provide access for livestock management, mining claimants, and general recreationists. All of the ways (W-1 through 17) would be closed to vehicular traffic after wilderness designation.

Morgan Pass Road is currently utilized by mining claimants, livestock operators, and recreationists. It would remain open to vehicular traffic and would greatly enhance access to the Bluebell and Goshute Peak Wilderness Areas, if they were designated.

For several reasons the northern 6022 acres are unmanageable as part of a wilderness area. First, the Marblehead Lime Company has many claims in sections 10, 14, 15, 22, 23, 24, 25, 26, and 27 of T. 34 N., R. 68 E. They intend to mine the area for its lime deposits. These areas are immediately outside the WSA to the east but such a development would have a significant adverse impact on the naturalness and feeling of solitude in sections 16, 21, 22, 27, and 28 of T. 34 N., R. 68 E. of the WSA. Second, the northern border of the WSA is formed by private land. No change in use is expected in the near future on these lands. However, to avoid possible problems in the future with restricted access, any wilderness area boundary should be moved south. Third, the odd configuration of the WSA's northern portion would be deleted with removal of all or parts of sections 16, 19 to 22, and 27 to 33 of T. 34 N., R. 68 E. from any wilderness area. Fourth, utilizing W-2 to its terminal end as part of the northern border of the wilderness area would provide good vehicular access to nearly the entire wilderness area boundary. The WSA's northeast border is formed by a ridgeline trending southeast through sections 16, 22, and 27 of T. 34 N., R. 68 E. If this were retained as the wilderness area border, access to the northern portion would be very difficult.

Approximately 1,335 acres along the southwestern boundary of the WSA are also unmanageable as a wilderness area. The high and good mineral potential for metallics and non-metallics in sections 1 and 12 of T. 32 N., R. 67 E., and sections 6 and 7 of T. 32 N., R. 68 E. and section 36 of T. 33 N., R. 67 E. are considered a manageability problem.

For the above reasons the boundary of the manageable area is formed by a straight line southwest from the terminal end of the Tunnel Spring Road in section 28 of T. 34 N., R. 68 E. to a peak in section 33 of T. 34 N., R. 68 E. at 7744 feet, thence a straight line west-southwest to the terminal end of W-2 in section 32 of T. 34 N., R. 68 E., and then along the way to the western border road. The southwestern boundary of the WSA would also be modified to delete 1,335 unmanageable acres. All other manageable boundaries would be the same as the WSA boundary (refer to Alternative Map in Wells RMP). Wilderness values would be maintained over the long-term in the manageable wilderness area listed above.

Rock Spring (terminal end of R-1), and Sidehill and Morgan Springs (along R-4) are recommended for future development to protect the springs from trampling by wild horses and mule deer. The spring improvements would not result in increases in livestock AUMs, but would improve livestock, wildlife and wild horse ranges through enhanced water distribution and protection of the spring sources. The springs would be boxed, fenced and an underground pipeline installed lending to trough(s) outside of the fences. These would be constructed and maintained by the BLM. Their development would greatly enhance the wilderness character of the area by providing water for recreation users, wild horses, livestock and wildlife, but would not create any significant visual intrusions. The IMP Guidelines allow construction, including the use of motorized equipment, of these developments in WSAs if the non-impairment criteria are met. However, construction of such development in a designated wilderness area would generally be restricted by the Wilderness Management Policy dated September 1981 to non-mechanical means.

Wild horse gathering would continue so that numbers in the Goshute Wild Horse Herd Management Area would be kept at the level determined by the Wells RMP. During gathering operations vehicular access would be allowed up cherrystemmed roads, and possibly ways, to locate portable traps and remove captured horses. Helicopter flying over the wilderness area could also be allowed during the gathering procedures subject to stipulations of the Wilderness Management Policy.

The boundaries of the 48,308 acre portion of the WSA (in the Preferred Alternative) are identifiable and manageable. Admittedly, some degredation of wilderness values would occur from illegal nonconforming uses. However, the area can generally be managed to maintain its wilderness values over the long-term.

QUALITY STANDARDS

Standard No. 1: Energy and Mineral Resources Values

Mineral potential classification is as follows:

Class 3, High Potential - High potential is assigned to areas that contain or are extensions of active or inactive properties which show evidence of ore, mineralization and favorable geologic characteristics. All producing properties fall within this category.

Class 2, Good Potential - Good potential is assigned to areas with several geologic characteristics indicative of mineralization, relatively lower economic value of past production, similar environments but at greater distances from known ore and mineral occurrences. This category may include areas adjacent to known districts or in mineral belts.

Class 1, Low Potential - Low potential is assigned to areas that have relatively few favorable geologic characteristics, no known mineral occurrences, or are buried by considerable alluvium.

This summary of geology and mineral potential has been prepared on the basis of the Wells Mineral Resource Inventory (MRI), company responses to a request for input, staff field work, available literature, and the contract GEM assessment of WSAs.

Available data indicates that the Bluebell WSA has relatively small areas of high and good locatable mineral potential, with most of the WSA having low mineral potential. Table 7 shows the potential for metallic and non- metallic minerals, phosphates, oil and gas, and geothermal resources in the Bluebell WSA. Map 4 displays these by location.

Table 7

Bluebell WSA Mineral Potential Acres

	Potential		
	High (3)	Medium (2)	Low (1)
Minerals (M)	900	4,000	50,765
Phosphates (P)	-0-	900	54,765
Oil & Gas (OG)	-0-	-0-	55,665
Geothermal (G)	-0-	-0-	55,665

Source: GEM Assessment, February 1983.

Rocks cropping out within the WSA are chiefly Paleozoic limestones and are complexly faulted. Igneous activity has occurred in the east-central part of the range and probably served as a source for the mineralization apparent in the area. Rocks correlative to those cropping out in the WSA are known to be favorable hosts in nearby mineralized areas (Ferguson Springs, Ferber, Whitehorse Pass, Silver-Zone, and Decoy Mining Districts).

Small high grade barite deposits occur along the range-front fault on the west side of the range. An old manganese mine in the Decoy Mining District is also along the west fault line, indicating a possibility of mineralization at depth. Mineral Resource Inventory (MRI) rock analyses show anomalous concentrations of barite, manganese, vanadium, and zinc in the Decoy Mining District.

Limestone is the dominant lithology in the WSA. Most of the limestone is apparently of a quality suitable for producing lime. Marblehead Lime Co. has undevelopment claims for limestone along the northern border of the Bluebell unit. The limestone is potentially valuable on the claims due to a close proximity to rail lines and Interstate 80.

The potential for an oil and gas discovery in the WSA exists, but the probability is low. The more favorable intermountane areas are outside the WSA.

Phosphates correlative to the Permain Phosphoria Formation; which is a considerable producer of phosphates in southern Idaho, occur in the north-central part of the unit (P-2 on the Bluebell WSA Mineral Potential Map). The limited extent of this occurance and the thin nature of similar phosphate rocks in northeastern Nevada make it doubtful that the resource would be developed in the forseeable future.

Areas shown as M-2 or Map 4 were delineated on the basis of geochemical anomalies, claim locations, and favorable geologic units and structures.

Conclusions:

1. There is no active mining in the WSA.
2. Minor exploration has taken place, but no mineral development has occurred within the WSA and no significant ore deposits are known to exist.
3. There are no known critical or strategic minerals in the WSA, however, the potential for discoveries of manganese (critical) and copper, barite, lead, and tungsten (strategic) are considered good on 4,000 acres and high on 900 acres.
4. The great majority of the WSA has low mineral potential for all commodities.

Standard No. 2: Impacts on Other Resources (including Wilderness) by Alternative

Resource Protection (All Wilderness) Alternative

Minerals:

With wilderness designation the area would be segregated from all forms of mineral entry with the exception of valid existing rights. This would preclude drilling in the area and the potential discovery and development of mineral resources would be foregone. This is considered an insignificant impact to the 5,800 acres with good or high mineral potential and represents only 0.6 percent of the resource area with good or high mineral potential (Wells RMP). Approximately 9,600 acres leased for oil and gas would be adversely affected but is considered insignificant due to the low probability for these resources.

The cost to explore and develop the 49 post FLPMA mining claims in the WSA would be adversely affected or precluded after designation. Prior to approving a plan of operation on these claims after designation, the Wilderness Management Policy states "the District Manager shall cause an examination of the unpatented claim(s) by a BLM minerals examiner to verify whether or not a valid claim exists". If they were determined invalid they would be considered null and void. Regulations addressing mining activity in wilderness areas on BLM lands have not be finalized. When complete they will outline restrictions that may be imposed on development and extraction. However, it is expected that restrictions would be imposed that would add costs or preclude development.

Woodland Products:

The WSA contains 27,830 acres or 4.5 percent of the resource area's pinyon, juniper, and mahogany woodland products useable for Christmas trees, fuelwood, fence posts and pinenut collection (see Map 5). With expected demand, sufficient quantities of trees exist elsewhere in the resource area so that wilderness designation would have no significant impact on the sustained yield managment of fuelwood and fence post cutting or pinenut collection. However, the Bluebell and Goshute Peak WSAs are the only solid blocks of forested public land within a 60 mile radius of Wendover, Utah. The Goshute Mountains have historically been the main use areas for collecting fuelwood, posts, pinenuts and Christmas trees for the Wendover community, as well as some residents in the Salt Lake Valley. Without legal public access onto forested checkerboard lands, both individual persons and commercial interests living in the Wendover area and a small portion of the Salt Lake Valley population, would experience increased costs in gathering woodland products because of increased distances of woodland product availability. These increases in cost and time could be significant to these people.

Wilderness designation would have a significant adverse impact on the availability of pinyon pine Christmas trees. Currently, the harvest of Christmas trees (both commercial and private) in the resource area is about 3,500 yearly, while demand is about 15,000. The Bluebell WSA could provide about 600 trees per year on a sustained yield basis; increasing the resource area harvest by about 17 percent. The harvest of these 600 trees would be foregone under this alternative.

Livestock Grazing:

Table 8 displays livestock grazing information in the WSA.

Table 8

Allotment	Number of Permittees	Authorized Season of Use in Allotment	Actual Period of Use in WSA
Spruce 1/	3	Yearlong	Winter & Spring
Big Springs 1/	1	Yearlong	Yearlong
Pilot 2/	1	11/15-3/31	Winter
Leppy Hills 2/	1	12/15-3/31	Winter
Utah/Nevada #1 1/	1	11/10-5/10	Winter

1/ All current use is by cattle.
2/ All current use is by sheep.

Source: Grazing Case Files - Wells Resource Area (January 1983)

These animals generally graze in the lower elevations and operators manage them via the border roads, cherry-stemmed roads and ways that penetrate the WSA. With designation, livestock operators would generally be required to manage their livestock on horseback or foot while leaving their vehicles on border roads or at the terminal end of cherry-stemmed roads. This would slightly impact the Big Springs Allotment operator as an estimated additional eight hours of yearly labor would be used. Wilderness designation would not affect the other operators with allotments located within any Wilderness Area.

Two limiting factors for increasing the amount of AUMs permitted in the WSA are the sparse availability of water and the steep topography. With or without wilderness designation, springs would be developed and maintained for livestock, wildlife, (see Manageability section) and wild horse range enhancement. There would be no additional construction or maintenance costs imposed on livestock operators. No other range improvements are proposed in the WSA.

Large amounts of forage nearby but outside the WSA are available to livestock for their use. Also, there is little local or regional economic dependence on livestock grazing in the Bluebell WSA. Therefore, there are no significant livestock management values foregone or adversely affected as result of wilderness designation.

Recreation:

The wilderness area, representing about 1.3 percent of the resource area, would be closed to ORV use if designation by Congress. This would slightly reduce opportunities to enjoy motorized recreational activities while enhancing the opportunities for primitive and unconfined recreational activities.

Mule deer, chukar and dove hunting are available in the WSA and are considered fair (see Table 2). Other areas such as the foothills of the Ruby and East Humboldt Mountains and O'Neil Basin are considered better areas in the district for mule deer hunting. The potential for increasing the deer chukar populations in the WSA is limited by the availability of water sources.

Roads R-1, 3, and 4 and ways W-5, 7, and 8 (see Map 1) are utilized by recreationists; primarily hunters. The closure of the ways to the general public would slightly reduce the number of hunters in the area. However, those who did hunt would experience an increased quality of hunt because of fewer people but additional inconvenience from having to walk or ride horseback. Therefore, overall, there are no hunting values foregone or adversely affected as result of wilderness designation.

Currently, recreation use is estimated at 300 visitor days per year in the WSA. Without wilderness designation this use is expected to increase to about 600 visitor days. With designation the recreation use is estimated to be about 1500 visitor days per year. Therefore, the loss of hunter days expected would be made up by increased use by backpackers, and hikers, campers, sightseers and other recreationists.

Wilderness:

In this alternative the wilderness resource would receive maximum protection which would ensure the wilderness integrety of most of the area. It would not, however, prevent adverse impacts on 7,357 acres that are expected to lose thier wilderness character over time.

In particular, mining activity is likely to occur on the northeast portion of the Morris Basin area as well as around the Decoy mining district, but only where a valid discovery occurs on a claim located prior to designation.

Loss of opportunities for solitude could be a temporary, short term impact, and some permanent loss of naturalness is inevitable, but the scale of operation would not likely be sufficient to permanently destroy the wilderness values of the entire area. However, development of claims just outside the northeast boundary of the wilderness around by the Marblehead Lime Company would have a significant adverse affect on the wilderness area (see manageability section, Criterion No. 2).

Designation would serve to protect the wilderness values of the area from the impacts of additional mineral exploration and extraction, range development, woodland product harvest, and casual road building associated with recreation. These would be significant beneficial impacts occuring in both the long and short terms.

Wilderness designation would protect the archaeological resources in the WSA because access to cultural resource sites would become more difficult. This would reduce the occurrence of vandalism and allow archaeological sites to retain their integrity for a longer period of time. Some negative impacts could occur to archaeological sites along the border road and cherry-stemmed roads.

Watershed:

All watersheds, including the 5,600 acres of high erosion potential watershed (see Map 1), would be protected from future deterioration if the WSA is

designated a wilderness area. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment in mineral exploration and development would be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases in sediment production.

Wildlife:

In general, big game habitat would be protected by wilderness designation as future developments destructive to habitat would not occur and closure of ways to vehicle traffic would minimize wildlife harrassment. Wilderness designation could allow construction of guzzlers for wildlife and prescribed burns to enhance escape routes for bighorn sheep. Restricted development would be especially beneficial to lambing of bighorn sheep if they are reintroduced into the WSA.

The 5,700 acres of antelope yearlong habitat could possibly be improved to a fair condition with improved range management along the benches. With designation, habitat development and improvement projects would probably be implemented in the wilderness area to enhance bighorn sheep habitat. Thereby, increasing opportunities for their reintroduction. In addition, portions of the 12,650 acres of bighorn sheep yearlong habitat could be improved to a fair condition. Neither the crucial deer winter range nor the deer yearlong range within the WSA is significant enough to require special management. Therefore, the 1,450 acres of deer winter range would remain in a good condition and the 22,000 acres of deer yearlong range would remain in an unknown condition (until future studies reveal condition) as no wildlife improvement projects are proposed.

Migrating raptors and possible roosting bald eagles would also be protected by wilderness designation because of restricted development.

MIDRANGE AND PREFERRED ALTERNATIVES

Minerals

Impacts would be similar to those of the Resource Protection Alternative (ALL WILDERNESS) with the following exceptions.

If designated wilderness, approximately 3,850 acres with good mineral potential would be in the WSA while 1,050 acres with good mineral potential would be located outside the WSA. This would reduce the amount of good mineral potential in the WSA by 27 percent from the Resource Protection Alternative. The enire 900 acres of high mineral potential would be eliminated from the WSA under this alternative. In addition, about 28 mining claims and 6,600 acres leased for oil and gas would be located within the WSA. This represents a decreae of 30 percent in mining claims and 31 percent of acres leased for oil and gas in the WSA from the Resource Protection Alternative.

Woodland Products:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

The acres of woodland products located within the WSA would be reduced from 27,830 (Resource Protection Alternative) to 23,000 under this alternative. These 23,000 acres could provide about 500 Christmas trees per year on a sustained yield basis; increasing the resource area harvest by about 14 percent. Therefore, the significant adverse impacts of harvest forgone would be reduced from the Resource Protection Alternative.

Livestock Grazing:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Motorized access for livestock operations would be enhanced as four miles of ways, eliminated from the WSA, could be used to manage livestock. Therefore, only an estimated six additional yearly hours of labor would be needed in the Big Springs Allotment.

Recreation:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Motorized access for recreationists would be enhanced as four miles of ways, eliminated from the WSA, could be used. Approximately 7,357 acres, or 13.3 percent of the WSA would remain open for ORV use while 48,308 acres or 86.7 percent would be closed with designation as wilderness.

Wilderness:

Impacts would be similar to those of the Resource Protection Alternative with the following exception.

Wilderness values would be maintained on 48,308 acres and lost on 7,357 acres over the long-term.

See Manageability Section (Criterion No. 2).

Cultural Resources:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Site total projections indicate the presence of about 709 open aboriginal, 56 rock shelters, and 35 historic sites within the wilderness area.

Watershed:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Approximately 5,150 acres of potential high erosion watershed would be located within the boundaries of the wilderness area under this alternative.

Wildlife:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Approximately 5,000 acres of antelope yearlong range would remain in a poor condition.

RESOURCE PRODUCTION ALTERNATIVE

Minerals:

If designated wilderness, impacts to energy and mineral resources would be significantly reduced from the Resource Protection Alternative as the 4,900 acres of good and the 900 acres of high mineral potential would be outside the boundary of the WSA. In addition, no mining claims or oil and gas leases would be located within the WSA.

Woodland Products:

Under this alternative, only 14,500 acres of woodland products would be the wilderness area. These 14,500 acres could provide about 350 Christmas trees per year on a sustained yield basis; increasing the resource area harvest by about 10 percent. Therefore, the significant adverse impacts of harvest forgone would be reduced from the Resurce Protection, Midrange, and Preferred Alternatives.

Livestock Grazing:

Motorized access for livestock operations would be enhanced as 17 miles of ways, eliminated from the WSA could be used to manage livestock. This should mean that no additional hours of labor would be needed by the Big Springs Allotment. In addition, livestock operations and range improvements located outside the wilderness area would not be subject to restrictions as stringent as those in a wilderness area.

Recreation:

Impacts would be similar to those of the Resource Protection, Midrange and Preferred Alternatives with the following exceptions.

If designated wilderness, approximately 25,830 acres would be closed to ORV use. Motorized recreational access would be enhanced from the Resource Protection, Midrange, and Preferred Alternatives as only five miles of ways would remain within the WSA while 15 miles of ways and 29,835 acres would be eliminated from the WSA and remain open for ORV use.

Opportunities for primitive non-motorized recreation would be reduced from the Resource Protection Alternative.

Wilderness:

Impacts would be similar to those of the Resource Protection Alternative with the following exception.

erness values would be maintained on 25,830 acres and lost on 29,835 acres the long term. Opportunities for solitude and primitive recreation would educed.

ural Resources:

acts would be similar to those of the Resource Protection Alternative with e following exceptions.

e total projections under this alternative indicate the presence of about 0 open aboriginal, 50 rock shelters, and 30 historic sites within the WSA. ltural resources would be protected to a lesser degree under this lternative than under the Resource Protection, Midrange and Preferred lternatives as motorized access would be greater which could in turn lead to reater vandalism of sites.

Watershed:

Impacts would be similar to those of the Resoure Protection, Midrange and Preferred Alternatives with the following exceptions.

Approximately 4,400 acres of potential high erosion watershed would be located within the wilderness area. Watershed would be protected to a lesser degree than under the Resource Protection, Mid-Range and Preferred Alternatives as surface disturbing activities on the 29,835 acres located outside my wilderness area would accelerate erosion.

Wildlife:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Generally, approximately 8,700 acres of mule deer yearlong habitat would remain in an unknown condition, 1,375 acres of deer winter habitat in a good condition, and 8,300 acres of potential bighorn sheep yearlong habitat could be improved to a fair condition. No antelope yearlong habitat would be located within the wilderness area. Opportunities for reintroducing bighorn sheep would be reduced.

Standard No. 3: Impacts of Nondesignation on Wilderness Values (and Other Resources)

NO ACTION (NO WILDERNESS) ALTERNATIVE

Other than wilderness, no new designation for the WSA area is anticipated. The area currently forms the northern half of the Goshute Mountain Wild Horse Herd Management Area. Livestock grazing, hunting, and woodland product harvest take place along cherry stemmed roads and ways at lower elevations.

Wilderness:

In the event of nondesignation, the wilderness characteristics of the WSA would probably be affected by mineral exploration and extraction, range improvements, and the harvesting of woodland products. Impacts resulting from ORV use at the lower elevations could also impact the wilderness character over time. The significance of these impacts cannot be predicted accurately as most are only potential impacts.

Only the most rugged and steep topographic portions of the WSA are anticipated to retain their wilderness character over time. An estimated 1,500 acres along the ridgeline would maintain its naturalness over the long-term. However, opportunities for solitude or primative and unconfined recreation would be lacking in such a small area.

Minerals:

There would be no adverse impacts to minerals under the No Action Alternative as all mineral and energy exploration and development would be managed under existing applicable laws and regulations governing such activities on the public lands.

Woodland Products:

There would be no adverse impacts to woodland products under the No Action Alternative.

Livestock Grazing:

Range Improvements would continue to be planned, analyzed through an environmental assessment, and implemented. No restrictions on the method of access into the area would be implemented.

Recreation:

Approximately 99 percent of the resource area, including the Bluebell WSA, would remain open for motor vehicle use. Current recreation use within the WSA would continue and would increase, resulting in establishment of new vehicle routes over the long-term.

Cultural Resources:

Management and protection of cultural resources would continue to be guided by all of the applicable laws affecting these resources. An indirect adverse effect of this alternative is that cultural resources would not be afforded the added long-term resource protection provided by wilderness designation.

Watershed:

Proposed activities would continue to be handled on a case-by-case basis to protect watersheds from excessive erosion. An indirect adverse effect of this alternative is that watersheds, including the 5,600 acres with high erosion potential, would not be afforded the long-term resource protection provided by wilderness designation.

Wildlife:

An indirect adverse effect of this alternative is that wildlife habitat would not be afforded the long-term resource protection provided by wilderness designation.

Due to potential mineral and energy exploration and development, as well as an increase in off-road vehicle use about 22,000 acres of deer yearlong, 1,450 acres of deer winter, 5,700 acres of antelope yearlong and 12,650 acres of potential bighorn sheep habitat are expected to decline in condition over the long-term. The potential for reintroducing bighorn sheep would essentially be lost under this alternative.

Standard No. 4: Public Comment

Comments received throughout the initial and intensive wilderness inventories and associated protest periods included those that supported WSA classification because of the outstanding quality of the area as well as those that disagreed. The latter mentioned the area as being roaded, the area's oil and gas and mineral potential, and that the area lacked outstanding characteristics. Protests were received from four individuals or agencies. These centered on the use of cherry-stemmed road boundaries and criticism of BLM wilderness personnel.

Comments received during the RMP scoping process were also generally from those either opposing or supporting wilderness designation of the WSA. One faction expressed concern for withdrawal of the area from mineral entry exploration and development and felt that taking the area out of production will hamper America's greatness. The other group mentioned the fact that the Elko District designated very few WSAs in comparison to other districts and that it was, therefore, particularly important that these areas be included in wilderness recommendations.

Standard No. 5: Local Social and Economic Effects

The Bluebell WSA is utilized by seven permittees for livestock grazing. Even though a very small percentage of their businesses are based economically on the lands within the WSA, the social aspect of the ranching way of life is very important to these ranchers and Elko County as a whole.

The opportunity for an individual or a company to prospect, locate minerals, and/or explore for oil and gas is also held in great regard by the residents of Elko County. Therefore, many local people philosophically disagree with wilderness designation because it would, in most cases, restrict or preclude such actions.

The local economy is based to a large degree on mining of hard rock minerals, especially gold and barite. The discovery of these, manganese or other minerals with economic value in the WSA could have a significant beneficial economic impact upon the county. However, such an impact, and conversely the loss of such a discovery through wilderness designation, is a potential impact at this time.

A publication prepared by the Department of Economics of Colorado State University in May 1981, states that the USFS estimated a value of $8.00 to $12.00 per visitor day of wilderness use in 1980. Using a $10.00 value, the user day benefits per year from the Bluebell WSA in the future without designation are estimated at $6,000 whereas with designation they would be about $15,000. The expenditures, income and employment associated with these benefits are insignificant to the local economy.

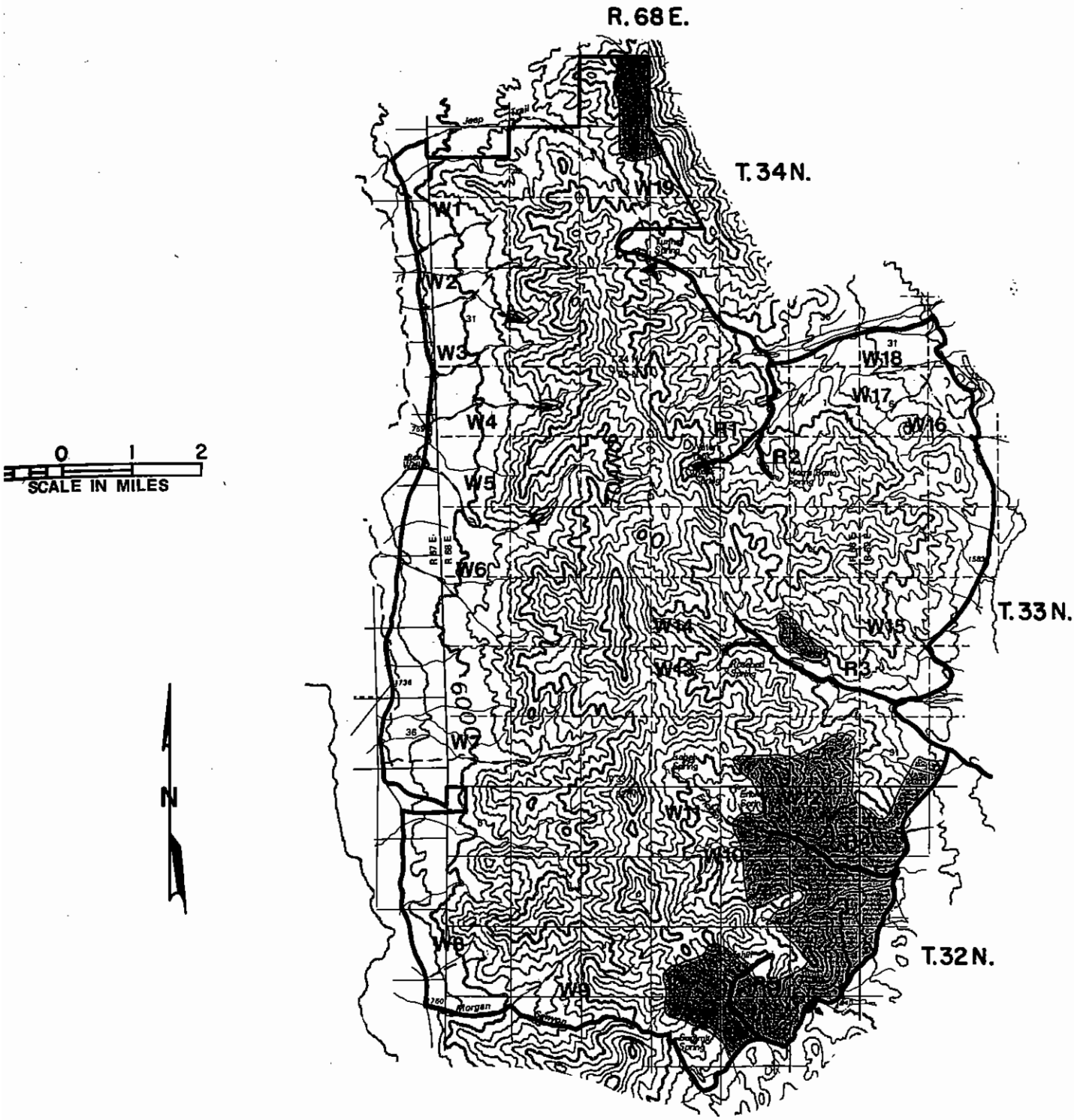
Standard No. 6: Consistency with Other Plans

Wilderness designation is consistent with the FLPMA, the Nevada Statewide Comprehensive Outdoor Recreation Plan (SCORP) dated August 6, 1982, and the General Plan for Elko County dated June 1971. For example the SCORP says that the State of Nevada should:

1) Preserve a representative cross section of Nevada's roadless, undeveloped areas in wilderness; and

2) Offer positive support to federal agencies charged with recommending areas for inclusion in the National Wilderness Preservation System.

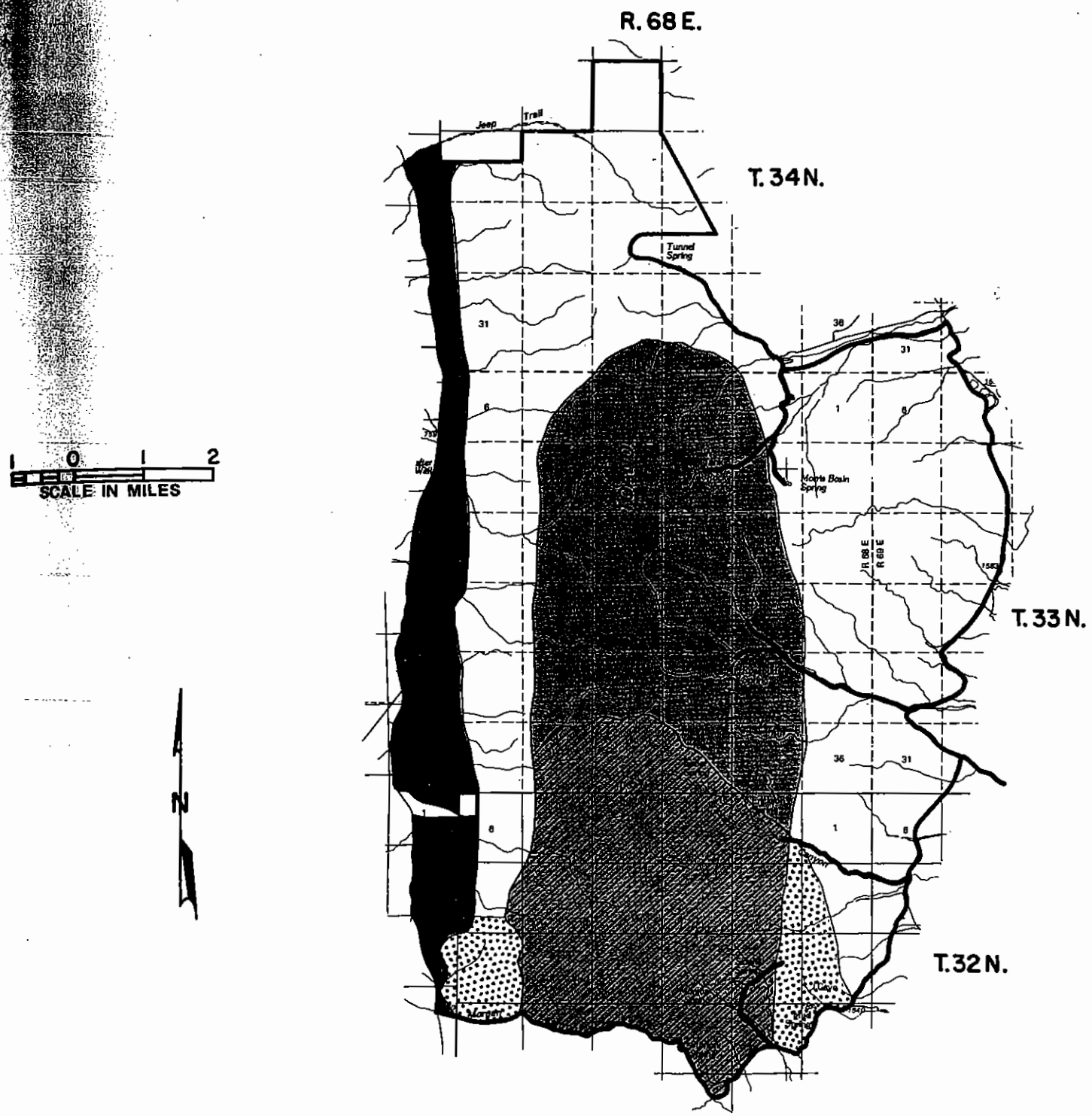
BLUE BELL
WSA MAPS



DOMESTIC LIVESTOCK & WATERSHED

BLUEBELL NV-010-027

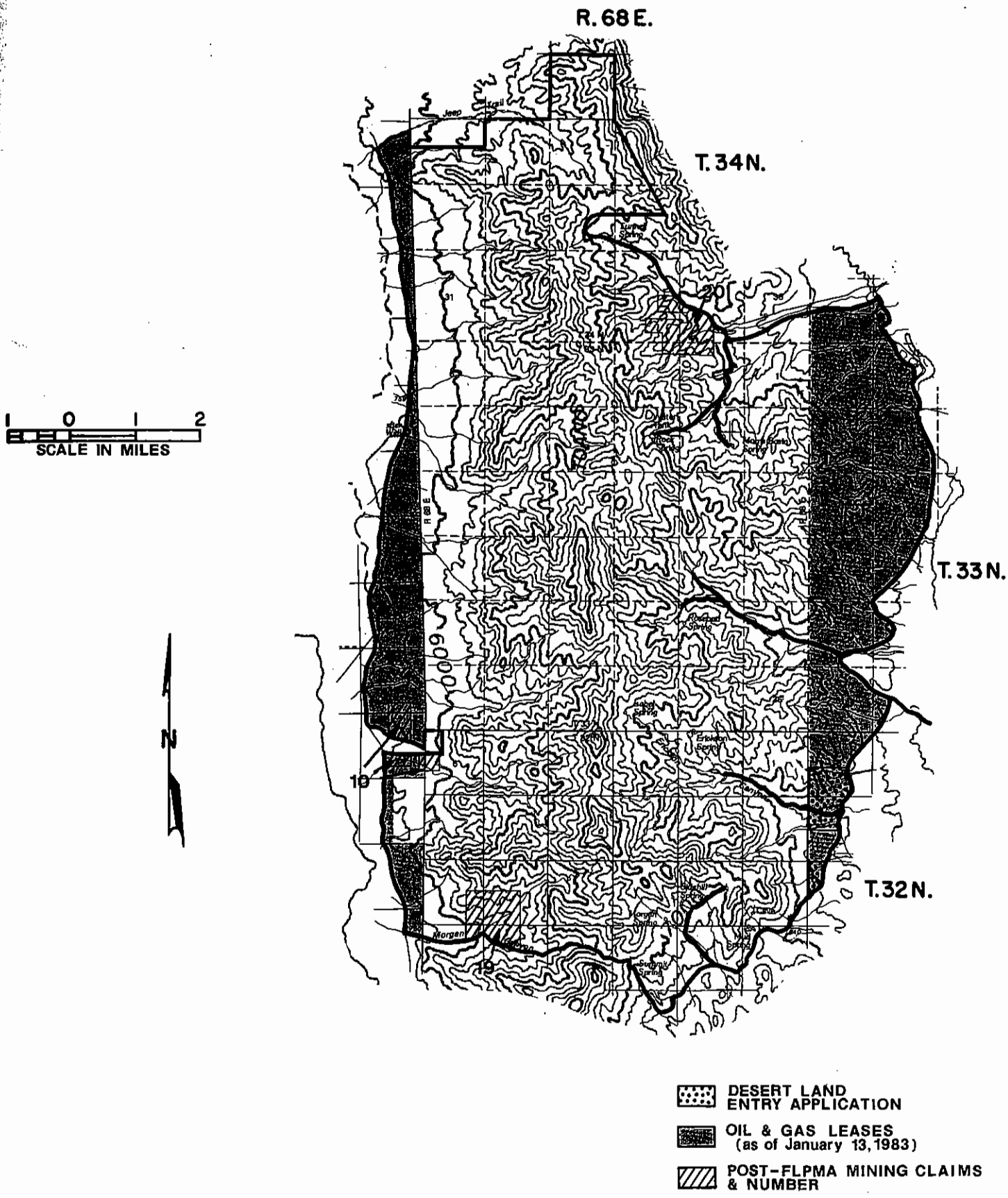
MAP- 1



WILDLIFE-BIG GAME HABITATS

BLUEBELL NV-010-027

MAP- 2



MINING CLAIMS & MINERAL LEASES

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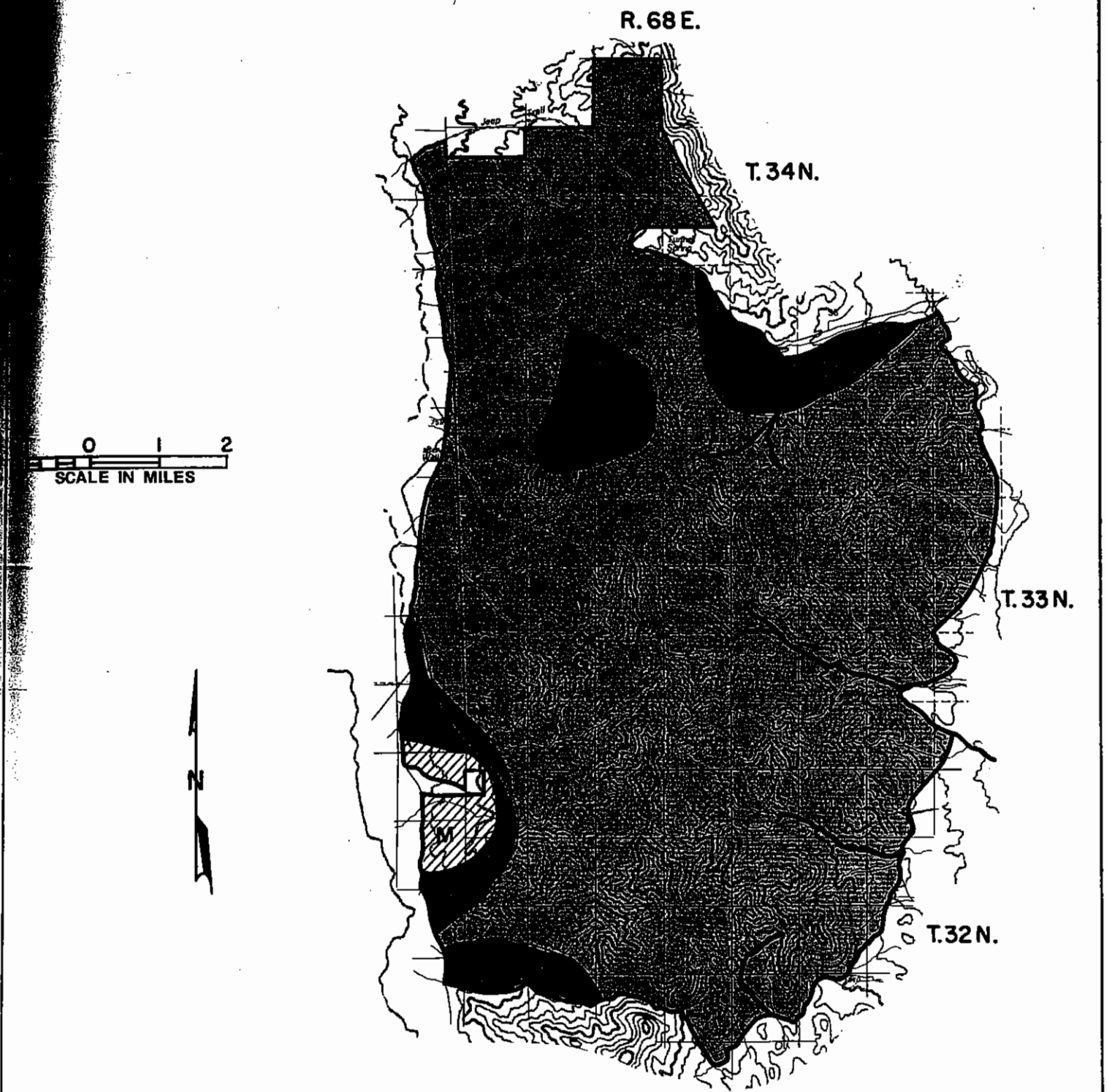
MAP- 3



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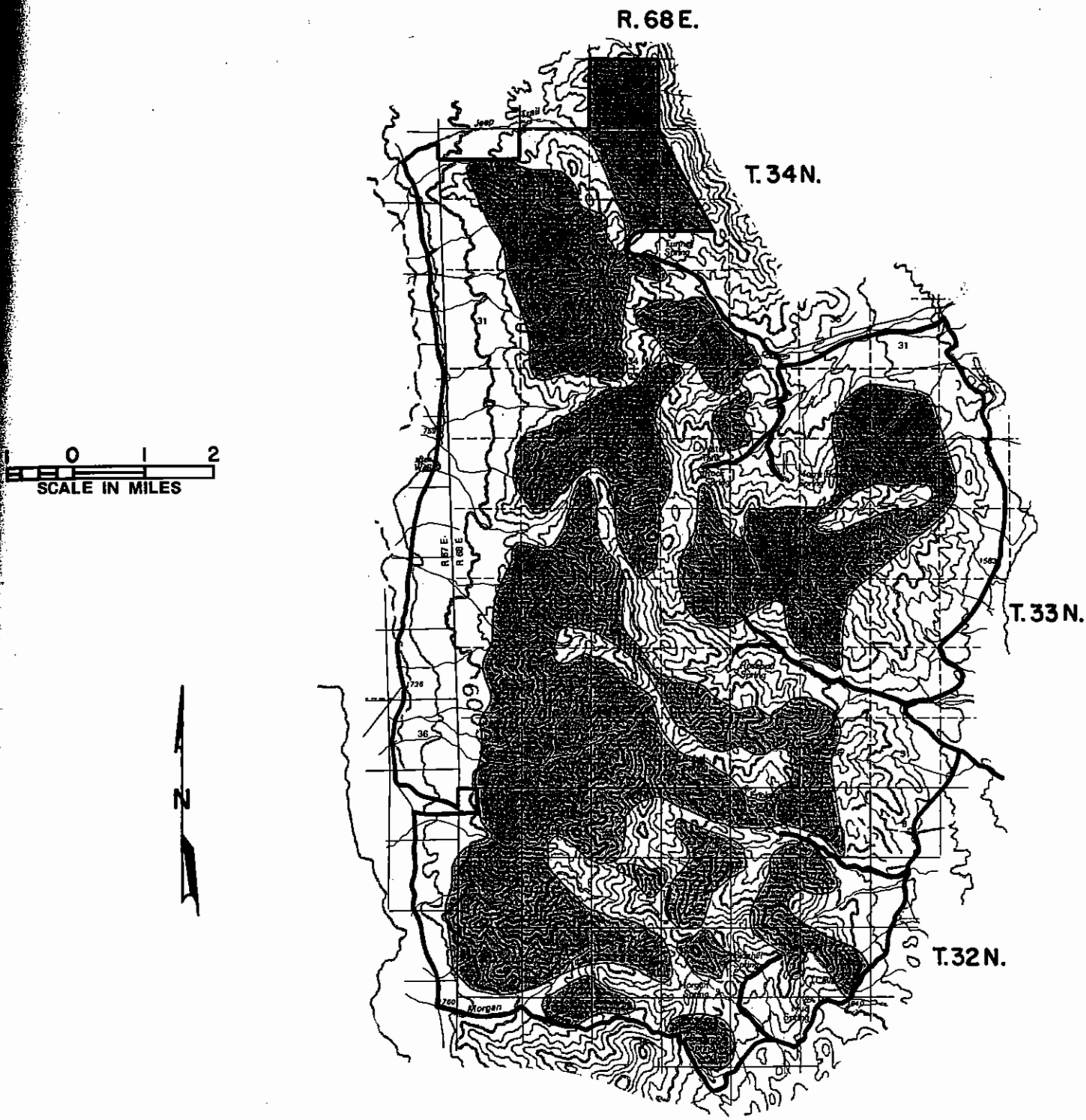
MAP- 4



WOODLAND
BLUEBELL NV-010-027
MAP- 5

GOSHUTE PEAK WSA

The Goshute Peak Wilderness Study Area is located about 100 miles east of Elko, Nevada and 20 miles southwest of Wendover, Utah in the Goshute Mountain Range (see location map, Wells RMP). The WSA is mountainous with densely forested hills and drainages. Steep rocky outcrops cover much of the southwest portion of the WSA. Uses of the area include harvesting woodland products, livestock grazing, mineral exploration, recreation, and wildlife research.

Table 9 shows the acres of the Goshute Peak WSA recommended as preliminarily suitable and unsuitable for wilderness designation by alternative.

Table 9

Goshute Peak WSA

	Resource Protection	Midrange & Preferred	Resource Production	No Action
Suitable Acres	69,770	65,585	45,618	-0-
Non-suitable Acres	-0-	4,185	24,152	69,770
% of WSA Suitable	100	94.0	65.4	-0-
% of Wells RA Suitable	1.6	1.5	1.1	-0-

Criterion No. 1: Evaluation of Wilderness Vaules

Wilderness values i.e., naturalness, outstanding opportunities for solitude and primitive and unconfined recreation, and special features would be maintained on approximately 65,585 acres and lost an approximately 4185 acres over the long-run with wilderness designation under the Midrange and Preferred Alternatives (see Criterion No. 2: Manageability).

Component No. 1: Quality of the Area's Mandatory Wilderness Characteristics

A. Naturalness

The 69,770 acre WSA contains relatively few man-made improvements for its size. There are 30 ways totalling 27 miles and a 1 mile cherry-stemmed road which penetrates the area (See Map 6). Most of these routes are less than a mile long and provide access from the border of the WSA across the level terrain to the drainages formed by the Goshute Mountains. These are generally used by livestock operators and recreationists. With designation the ways would be closed to motorized use and are expected to rehabilitate naturally over time.

An unauthorized deer hunter's cabin, accessible by vehicle, exists at the terminal end of W-1. It is developed and includes a wood stove, bunk beds, a table and chairs, cupboards, a good supply of food and water, cooking and eating utensils, aluminum windows, and an asphalt shingled roof. There is also a fire ring and grill about 100 feet from the structure. The cabin is located in a moderately dense stand of pinyon pine, juniper, and mountain mahogany and is difficult to see from more than 50 feet away. The cabin is also hard to locate from the air.

A one mile long fence runs easterly into the WSA from the western border road between W-16 and 17. Also, a corral is located along the western side of W-19 about half way to its terminal end. These impacts are substantially unnoticeable.

For the past four years access route W-25 leading up Christmas Tree Canyon has been utilized by wildlife biologists for access to a raptor counting and trapping area in the WSA. Biologists drive to the terminal end of this route, park and hike westerly to the trapping area located on the ridgeline in the SE1/4 of section 35 of T. 29 N., R. 68 E. The trapping area consists of two blinds (about 6 feet wide, 5 feet tall, and 4 feet deep) built of plywood and canvas covered with pinyon pine bows for camouflage. A cache of water and food is located nearby. When the trapping is ongoing (September to mid-October) there is also camping equipment, nets, traps, and rigging placed about the area.

A deer hunter's camp is located in section 13 of T. 30 N., R. 68 E. along the southern side of W-26. The camp contains several 55-gallon drums used as trash containers, bedsprings, and assorted pots and pans.

The only developed spring in the WSA is Felt Spring located in section 12 of T. 30 N., R. 68 E. at the end of W-30.

The access routes of W-20, 21, 22, 23, and 24 are concentrated in a small area (about two miles by one mile) in the southeastern part of the WSA. The cumulative impact of these ways are substantially noticeable and are partially responsible for the recommendation of 4185 acres as nonsuitable for designation under the Midrange and Preferred Alternatives. The other ways and man-made impacts in the WSA are separated by large distances and are substantially unnoticeable.

B. Outstanding Opportunities for Solitude and Primitive and Unconfined Recreation

1. Solitude

The 69,770 acre WSA is about the size of the majority of the existing wilderness areas. It is oblong and measures about 20 miles by 7 miles.

The topographic screening in the area is excellent. The WSA is composed of rugged mountains (45,770 acres) bordered to the east by rolling foothills (15,000 acres) and to the west by alluvial fans (9,000 acres). About 15 drainages, averaging from two to five miles long, wind through moderately dense stands of pinyon, limber, and bristlecone pine, Utah juniper, white fir, and mountain mahogany

from the ridgelines to the valley floors. The drainages are generally steeper on the west side than the east but all are passable on foot. The ridgeline itself is quite rugged with extreme relief; elevations range from 6,000 to 9,500 feet.

Vegetative screening is outstanding because of the amount, distribution, and variety of the in the vegetation. White fir, limber and bristlecone pine, and mountain mahogany provide excellent screening in the higher regions while pinyon pine and Utah juniper provide outstanding screening at the lower elevations.

Because of the excellent topographic and vegetative screening there are many areas where people can find a secluded spot throughout the WSA. This is particularly true in Lion, Felt, and Christmas Tree Canyons, and in unnamed drainages accessible via W-10, 15, and 27.

From eastern facing ridgelines, vehicles on Alternate Highway 93, and the communities of Wendover, Utah and West Wendover, Nevada are visable but cannot be heard. These impacts are about 3 to 20 miles from recreationists in the WSA and slightly diminish the benefits of wilderness designation to the user. Low flying military aircraft are occasionally seen and heard from inside the WSA. These outside impacts are not considered significant and, therefore, none of the WSA is recommended as nonsuitable for these reasons.

However, about 4185 acres in the southern end of the WSA are recommended as nonsuitable in part because Alternate Highway 93 and its associated powerline are substantially noticeable from the area.

2.

Primitive and Unconfined Recreation

Activities available in the WSA include backpacking/camping, hiking, horseback riding, hunting, wildlife observation, sightseeing/photography, rock climbing, and fossil collecting.

Backpacking/camping: The large size of the WSA greatly enhances the quality of these activities as several days would be required to experience much of the area. Backpacking, although difficult in places because of dense mountain mahogany, is quite challenging and rewarding to the wilderness user. The main ridgeline ranges from 6,000-9,500 feet but provides a good north-south route through the WSA. By traveling the ridgeline, a backpacker will experience much topographic relief but will avoid the dense stands of mountain mahogany and steep side slopes that the person who traverses will encounter. Saddles, both east and west of the ridgeline, are plentiful, level, and sheltered from the wind. About 15 large drainages also provide excellent areas for backpacking and camping. These drainages are good for exploring and are generally where archaeological resources can be found. Water availability is the greatest problem for an extended trip in the area. People should plan their trip in the late spring or early summer to take advantage of snow patches in the high country. The weather is also cooler

then and in the fall which reduces water consumption needs. Springs are located in some of the drainages but should not be relied upon as the only sources of water as they can be difficult to locate.

Hiking: Excellent day hikes are available in the WSA. Both the ridgeline and the major drainages have game trails that can be used as travel routes. Hikers can generally move through the pinyon pine and mountain mahogany and ascend mountains such as Goshute Peak without great difficulty. Water is not such a problem as only a one day supply must be carried.

Horseback riding: This activity is possible in the lower elevations but would be hampered in the higher terrain by dense vegetation and steep slopes. Water availability is also a limiting factor. Horseback riding would allow a user to experience a greater amount of the WSA in a shorter period of time than the foot traveler.

Hunting: Animals hunted in the WSA include mule deer and chukar partridge. Portions of the WSA are considered winter and yearlong habitat for deer. The drainages are the predominant areas where hunting has and will continue to occur. Steeper slopes at higher elevations make hunting difficult. There are better hunting areas in the Elko District, consequently the WSA is considered fair but not outstanding for hunting. Table 10 displays deer hunting information for hunting management unit 106 which includes the Goshute Peak and Bluebell WSAs.

Goshute Peak WSA

Table 10

Mule Deer Hunter Days (General Season)

Hunting Unit	1981	1980	1979	1978	1977
Management Unit 106 (includes Goshute & Bluebell WSAs)	31(a) 166(b)	21 106	24 121	19 68	15 50

(a) = Number of hunters.
(b) = Days spent hunting.

Source: Nevada Department of Wildlife (NDOW), 1982.

Wildlife Observation: Raptor viewing is considered excellent in the WSA. In September and the first half of October of each year about 5,000-6,000 raptors migrate south over the WSA ridgeline. Raptors to be seen include golden eagles, red-tailed hawks, goshawks, American kestrals, and Cooper's hawks. Opportunities for viewing bald eagles are available during the winter. Other animals to be seen include wild horses, mule deer, small birds and mammals (see Table 12).

Sightseeing/photography: These two activities are excellent within the unit. The topographic diversity combined with the WSAs forested condition make excellent photographic subjects. The rocky outcrops of the peaks as seen from lower elevations in the western half of the unit also provide great subjects. Other items of photographic interest include bristlecone pine and archaeological resources.

Rock Climbing: There are numerous areas in the WSA which include limestone faces of from 150-200 feet high. These cliffs provide good practice areas for the technical climber. Many areas of interest to the rock scrambler can also be found. Mountain climbers would be more attracted to Goshute Peak than Bluebell WSA because it offers more rock faces and more difficult longer climbs.

Fossil Collecting: Abundant intertebrate fossils are found weathering out of the limestones and shales. Fossils are most commonly found in freshly eroded areas near roadcuts, cliffs, and ephemeral streams. Recorded specimens collected from this WSA include stirferid, atrypid, rhynchonellid, and productid brachiopods. Mollusks found include platyostomes, polygyras, crepidula, and ammonities. These fossils are valuable to the scientific community as well as to the amateur collector.

Component No. 2: Special Features: Quality of the Area's Optional Wilderness Character

Ecological: The diversity of the flora and fauna in the Goshute Peak WSA are considered unique ecological features. Table 11 lists the flora in the WSA while Table 12 displays the fauna.

A bald eagle wintering roost site has been discovered in the southern portion of the Goshute Peak WSA. The site is a limber pine which measures 57 feet tall and 2 feet in diameter. The site is known to have been used by wintering bald eagles from November to April 15 for the past four years and is believed to have been used for the past 15 years. District wildlife biologists believe that additional roost trees may exist in the Goshute Peak WSA because of its suitable topography and vegetative features. Such roosting areas for the threatened and endangerd species greatly enhance the wilderness value of the area.

The Goshute Mountains (Goshute Peak and Bluebell WSAs) are also the location of a yearly southern migration from September to mid-October of about 5,000-6,000 raptors. Raptors known to migrate through the WSA include golden and bald eagles, red-tailed hawks, goshawks, American kestrals, and Cooper's hawks. Steve Hoffman, a biologist with the U.S. Fish and Wildlife Service, has trapped and observed raptors in the Goshute Mountains for the past four years. He feels that the area is the most productive ridge site for raptor migrations in the west.

The WSA is also historical range for bighorn sheep. Studies are currently in progress by the NDOW to evaluate the reintroduction potential of this area for bighorn sheep. These reveal that the Goshute Mountains (Goshute Peak and Bluebell WSAs) support about 200 sheep.

Geological: In the Goshute Peak WSA Paleozoic rocks are exposed having a cumulative thickness of over 20,000 feet. These rocks were deposited in marine seas on a continental shelf from 550 to 270 million years ago. Limestone, often highly fossiliferous, is the dominant rock type, with lesser amounts of dolomite, shale, quartzite, and conglomerate. In a few areas Tertiary volcanic rocks, chiefly rhyolite and dacite, overlie the Paleozoic rocks.

Goshute Peak

Table 11

FLORA

Grasses	Forbs	Shrubs
Downy Brome	Goldenweed	Little Rabbitbrush
Bluebunch Wheatgrass	Locoweed	Black Sagebrush
Sandberg's Bluegrass	Stickseed	Shadscale
Squirreltail	Gilia	Low Sagebrush
Indian Ricegrass	Phlox	Big Sagebrush
Needle-and-thread	Cryptantha	Nevada Mormon Tea
Basin Wildrye	Tansymustard	Winter (White Sage)
Western Wheatgrass	Hood's Phlox	Grey Horsebrush
Bentgrass	Rockcress	Rubber Rabbitbrush
Nevada Bluegrass	Russian Thistle	Oregon Grape
Thurber's Needlegrass	Longleaf Phlox	Cliffrose
Fescue	Indian Paintbrush	Curlleaf Mt. Mahogany
Junegrass	Dusty Maiden	Littleleaf Horsebrush
Spikegrass	Broomrape	Common Snowberry
	Stoneseed	Serviceberry
Trees	Lupine	Snakeweed
White Fir	Bedstraw	Wax Current White
Utah Juniper	Arrowleaf Balsamroot	Elderberry
Rocky Mtn. Juniper	Yellow Salsify	Bitterbrush
Pinyon Pine	Pricklypear Cactus	Greasebush
Limber Pine	Daisy	Rocky Mountain Maple
Bristlecone Pine	Aster	
Western White Pine	Halogeton	
Curlleaf Mt. Mahogany	Sedge	
	Pricklygilia	
	Grounsel	
	Bastard toadflax	

Goshute Peak

Table 12

FAUNA

Birds	Reptiles	Mammals
Chukar	Western Fence Lizard	Bighorn Sheep (Potential)
Red-tailed Hawk	Desert orned Lizard	Bushy-tailed Woodrat
Say's Phoebe	Sagebrush Lizard	Proghorn Antelope
Burrowing Owl	Collared Lizard	Mule Deer
Golden Eagle	Gopher Snake	Least Chipmunk
Common Raven	Striped Whipsnake	Coyote
American Kestrel	Western Rattlesnake	Mountain Lion
Lazali Bunting	Great Basin Skink	Golden Mantled Ground Squirrel
Morning Dove		Uinta Chipmunk
Purple Finch		Long-tailed weasel
Blackbilled Magpie		Yellow-bellied Marmot
Western Meadowlark		Pygmy Rabbit
Rufous-sided Towhee		Bobcat
Rock Wren		Idaho Ground Squirrel
Mountain Bluebird		Desert Woodrat
Mountain Chickadee		Cliff Chipmunk
Bald Eagle		
Prairie Falcon		
Common Flicker		
Broad-winged Hawk		
Coopers Hawk		
Marsh Hawk		
Sharp-skinned Hawk		
Swainsons Hawk		
Gray-headed Junco		
Ruby-Crowned Kinglet		
Clark's Nutcracker		
Red-breasted Nuthatch		
Osprey		
Great Horned Owl		
Chipping Sparrow		
Violet-green Swallow		
Vaux Swift		
White-throated Swift		
Hermit Thrush		
Turkey Vulture		
Broad-tailed Hummingbird		
Pinon Jay		
American Robin		
Townsends Solitaire		
Cliff Swallow		
Rock Wren		
Common Nighthawk		
Brewer's Sparrow		
Sage Thrusher		
Indigo Bunting		
Black-throated Sparrow		
Green-tailed Towhee		
Merlin		

Fossils are generally invertebrates, with a large variety of brachiopods, corals, bryozoans, and trilobites to be found. A number of rare and unusual fossil species occur in the WSA.

Because of the vast amount of limestone within the mountains it is believed there are caves within the WSA. A few shelters have been found but no caves have been discovered.

Scenic Value: From atop the ridgeline of the Goshute Mountains the Wasatch and Deep Creek Mountains of Utah can be seen, as well as the Salt Flats, Pilot Peak, and the Pequop, Cherry Creek, East Humboldt, and Ruby Mountain Ranges. Vistas of up to 100 miles to the Wasatch Mountains greatly enhance the feeling of isolation and solitude within the WSA. The rugged rocky outcrops throughout the WSA also enhance the area's scenic quality. Rock outcrops seen looking east from the western edge of the WSA are outstanding. They display banding and shadow effects for spectacular photographs. Bristlecone pine and the vegetative covered mountains also add to the scenic quality of the WSA. The twisted trunks of the bristlecone pine make excellent photographic subjects in the daytime as do their silhouettes in the evening.

Archaeological: Because of the great expense involved, only about one percent of the resource area lands have been inventoried for archaeological resources. From this inventory seven aboriginal sites are known to exist within the WSA. These sites contain typical Great Basin artifacts including projectile points, flakes, mano and metate fragments, pottery sherds, burned bone, drills, bifaces, and gravers.

One large open site is located on a ridgeline. About 1,000 flakes were found at this area which measures about 1700 feet by 700 feet. The area was probably used as a camp and seemed to have good depth as it was fairly sandy.

The site inventory data available was used for making statistical predictions of archaeological site totals projected for the WSA. These projections indicate the presence of about 990 open aboriginal, 60 rock shelters, and 50 historic sites within the WSA.

Scientific and Educational Values: The Goshute Wild Horse Herd Management Use Area includes the Bluebell and Goshute Peak WSAs. There are 120 wild horses in this area so a visitor who remains a day or two will generally see wild horses. Of interest also are bristle-cone pine trees; the same as those found in the Wheeler Peak Scenic Area near Ely, Nevada, but are younger and smaller. These unique trees greatly enhance the visitor's experience because of their old age and gnarled appearance. The variety of plants and animals in the WSA is also of educational value.

Component No. 3: Multiple Resource Benefits: The Benefits to Other Multiple Resources Values and Uses Which Wilderness Designation of the Area Could Ensure.

A. Values That Already Exist:

Wilderness designation would ensure that the naturalness, outstanding opportunities for solitude and primitive and unconfined recreation, special features and other resource values in the WSA would be maintained or enhanced over time.

Wilderness designation generally would protect the archaeological resources in the WSA. Because of restricted vehicular access the vandalism of sites would be reduced. Archaeological sites would therefore, retain their integrity for a longer period of time.

Wilderness designation would assure that wild horses would receive less harassment from vehicles. Closure of ways to vehicular access would provide more untraveled acres in which the horses could roam unmolested.

All watershed areas, including the 572 acres of high erosion potential watershed (see Map 6), would be protected from future deterioration if they were located within a designated wilderness area. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment in mineral exploration and development would be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases in sediment production.

Currently, there are approximately 21,500 acres of mule deer yearlong habitat in an unknown condition, 4675 acres of deer winter habitat in good condition, and 7000 acres of antelope yearlong and 62,000 acres of potential bighorn sheep yearlong habitat in a poor condition. (These are shown on Map 7).

In general, big game habitat would be protected by wilderness designation because future developments destructive to habitat would not occur and closure of ways to vehicle traffic would minimize wildlife harrassment. Wilderness designation could allow construction of guzzlers and prescribed burns for wildlife to enhance escape routes for bighorn sheep. Restricted development would be especially beneficial to lambing of bighorn sheep if they were reintroduced into the WSA.

Migrating raptors and roosting bald eagles would also be protected by wilderness designation because of restricted development.

Eyesores created by development such as powerlines, roads and gravel pits would not be allowed in the wilderness area, thereby, protecting its scenic quality.

B. Values That Do Not Now Exist:

Wilderness designation would enhance the possibility of the NDOW reintroducing bighorn sheep into the area. NDOW has considered this action for a long time but the agency wants to be relatively sure of the sheep's protection from man before any reintroduction is made.

C. Benefits to Areas Outside of the Wilderness Study Area:

The scenic quality of the WSA as viewed from outside the area and particularly Highway 93, would also be protected with wilderness designation.

Component No. 4: Diversity in the National Wilderness Preservation System

Factor No. 1: Expanding the diversity of natural systems and features, as represented by ecosystems and landforms.

Refer to Table 5 on Page 17. And Factor No. 1 on Page 16.

Factor No. 2: Assessing the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population enters.

Refer to Table 6 on Page 18. And Factor No. 2 on Page 16.

Factor No. 3: Balancing the geographic distribution of wilderness areas.

Refer to Factor No. 3 on Page 17.

Criterion No. 2: Manageability:

The Goshute Peak WSA is a solid block of public land. There are no parcels of state lands within its border. Twenty mining claims covering about 400 acres and 13 oil and gas leases comprising 12,870 acres are located generally around the perimeter of the WSA (see Map 8). No discoveries of ore have been reported and no drilling has taken place.

The boundary roads, including Morgan Pass Road and R-1 and W-3, 4, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 20, 21, 22, 23, 24, 26, and 30 (see Map 6) are used to provide vehicular access for a variety of purposes. All roads, including Morgan Pass Road, would remain open to all publics to provide access for livestock management, mining claimants, and recreationists. All ways in the WSA would be closed to vehicular access after designation as wilderness.

There are three reasons the southeastern and extreme southern 4,185 acres of the Goshute Peak WSA are unmanageable as wilderness. First, rights-of-way for both Alternate Highway 93 and a telephone line extend into the WSA. Second, there are five ways totalling about six miles concentrated in this area. These would be extremely difficult on which to manage vehicle use because of their proximity to Alternate Highway 93 and gentle terrain. Third, there is good mineral potential in this portion of the WSA.

For the above reasons the boundary of the manageable area diverts from the existing border road at the point where the road crosses between sections 31 of T. 30 N., R. 69 E. and section 6 of T. 29 N., R. 69 E. From this point the manageable area boundary is formed by straight line bearings to the terminal ends of W-24, 23, 22, 21, and 20. From the

terminal end of W-20 the border is formed by a southwestern bearing on the easternmost peak near the center of section 23 of T. 29 N., R. 68 E. From this peak the border consists of a direct west bearing back to the western WSA border road in section 22 of T. 29 N., R. 68 E. All other wilderness area boundaries would be the same as the WSA.

Several management decisions are pertinent to how the area, if designated wilderness, would be managed. These would be incorporated into a wilderness management plan and are discussed below. Closure of Morgan Pass road would combine the Goshute Peak and Bluebell WSAs into one wilderness area of 113,893 acres under the Preferred Alternative. Such a closure would be difficult to enforce as both livestock operators and mining claimants use the pass as a corridor between the two valleys on either side of the mountains. Recreationists also use the road for access to the ridgeline to begin or end backpack trips into either area. For these reasons closure of Morgan Pass Road is not considered manageable and, therefore, is not recommended.

The previously mentioned cabin in the northern part of the WSA presents management with several options. First, it could be left as is and be available for use by all persons. Second, it could be exclusively by wilderness rangers. Third, the cabin's outer shell could be left undisturbed but have the amenities such as bedding, stoves, table, chairs, etc. removed. Fourth, the structure could be burned and the remains hauled away. The recommended action is leave it as is and be available to the general recreation user in the wilderness area. If use over time requires wilderness rangers, then the cabin could be strictly used for that purpose.

Management should allow continuance of the yearly raptor trapping and counting in the southern part of the Goshute Peak WSA subject to limitations in the Wilderness Management Policy. Vehicular access sould be allowed up Christmas Tree Canyon to the terminal end of W-25. This would enable persons to haul necessary equipment for trapping operations to the base of the mountain before having to carry it on foot to the top. The vehicle traffic on the way, foot travel to the ridgeline, and small amount of equipment on the mountain from this endeavor are not expected to impair the wilderness character of the area.

IMP Guidelines allow construction, including the use of motorized equipment of various projects in WSAs if the non-impairment criteria are met. However, construction of various projects (i.e. spring developments, fences) in a designated wilderness area would be restricted by the Wilderness Management Policy to non-impairing, non-mechanical means.

Wild horse gathering would continue so that numbers in the Goshute Wild Horse Herd Management Area would be kept at the level determined by the Wells RMP. During gathering operations portable traps could be located on border roads and the terminal end of the cherry-stemmed road. Helicopter flying over the wilderness area could be allowed during the gathering procedures. Gathering operations would be subject to stipulations on page 25 of the Wilderness Management Policy with wilderness designation.

The boundaries of the 65,585 acre portion of the WSA proposed as suitable for wilderness (in the Preferred Alternative) are both identifiable and manageable. Admittedly, some degradation of wilderness values would occur from nonconforming uses. However, the area can generally be managed to maintain its wilderness character over the long-term.

QUALITY STANDARDS

Standard No. 1: Energy and Mineral Resource Values

Mineral potential classification definitions are shown in the Bluebell WSA analysis on page 20.

This summary of geology and mineral potential has been prepared on the basis of the Wells MRI, company responses to a request for input, staff fieldwork, available literature, and the contract GEM assessment of the WSA.

Available data indicates that the Goshute Peak WSA has relatively small areas of good locatable mineral potential with most of the WSA having lo potential for all other minerals. Table 13 shows the potential for metallic and non-metallic minerals, phosphates, oil and gas, and geothermal resources in the Goshute Peak WSA. Map 9 displays these by location.

Table 13

Goshute Peak WSA Mineral Potential Acres

	High (3)	Medium (2)	Low (1)
Minerals (M)	-0-	5,395	64,375
Phosphates (P)	-0-	-0-	69,770
Oil & Gas (OG)	-0-	-0-	69,770
Geothermal (G)	-0-	-0-	69,770

Source: GEM Assessment, February, 1983.

Rocks cropping out within the Goshute Peak WSA are chiefly Paleozoic limestones which are complexly faulted. Igneous activity has occurred in the east central part of the range and probably served as a source for the mineralization apparent in the area. Rocks correlative to those cropping out in the WSA are known to be a favorable host in nearby mineralized areas (Ferguson Spring, Feber, Whitehorse Pass, Silver-Zone and Decoy Mining Districts).

Small high grade barite occurrences have reported along the range front fault on the westside of the range.

A small amount of silver and copper was produced from the Ferguson Spring Mining district, adjacent to the WSA along the eastern boundary. MRI sample data shows anomalous concentrations of gold, silver, barite, copper, zinc, lead, and manganese in the Ferguson Spring Mining District. Areas shown as M-2 on Map 9 were delineated on the basis of geochemical anomalies, mining claims, alteration, favorable host rocks and structure.

High quality limestone is common throughout the WSA, however, the widespread occurrence of similar deposits much nearer rail lines and highways makes development in the WSA unlikely.

The potential for an oil and gas discovery in the WSA exists, but probability is low. The more favorable intermontane areas are outside the WSA.

There are no recorded geothermal resource areas in the vicinity of the Goshute Peak.

Conclusions:

1. There is no active mining in the WSA.
2. Minor exploration has taken place, but no mineral development has occurred within the WSA and no significant ore deposits are known to exist.
3. There are no known deposits of critical and/or strategic minerals in the WSA. However, small copper (a critical mineral) deposits occur immediately adjacent to the WSA and good potential exists for new discoveries of copper, lead, barite, tungsten (strategic) and silver on 5,395 acres in the WSA.
4. The great majority of the WSA has low mineral potential for all commodities.

Standard No. 2: Impacts on Other Resources (including Wilderness) by Alternative.

RESOURCE PROTECTION (ALL WILDERNESS) ALTERNATIVE

Minerals:

With wilderness designation the area would be segregated from all forms of mineral entry. This would preclude drilling in the WSA and the potential discovery and development of mineral resources would be foregone (except for valid existing rights). This is considered an insignificant impact to the resource area as the 5,395 acres with good mineral potential is only 0.6 percent of the resource area with good or better mineral potential. Appproximately 12,870 acres leased for oil and gas would also be adversely affected and considered an insignificant impact due to the low probability for these resources.

The cost to explore and develop the 20 Post-FLPMA mining claims in the WSA would be adversely affected or precluded after designation. Prior to approving a plan of operations on these claims after designation, the Wilderness Management Policy states "the District Manager shall cause an examination of the unpatented claim(s) by a BLM minerals examiner to verify whether or not a valid claim exists." If they were determined invalid, they would be considered null and void. Regulations addressing mining activity in wilderness areas on BLM lands have not been finalized. When complete they will outline restrictions that would be imposed on development and extraction. However, it is expected that any restrictions posed would add costs or possibly preclude development.

Mineral values are unknown and only the potential for energy and mineral development in the WSA exists. Therefore, no known mineral values would be foregone or adversely affected as a result of the areas's designation. The great majority of the WSA has low potential for all minerals.

Woodland Products:

The WSA contains 45,350 acres or 7.3 percent of the resource area's pinyon, juniper, and mahogany woodland products for Christmas trees, fuelwood, fence posts, and pinenut collection (see Map 10). With expected demand, sufficient quantities of trees exist elsewhere in the resource area so that wilderness designation would have no significant impact on the sustained yield management of fuelwood and fence post cutting or pinenut collection. However, the Goshute Peak and Bluebell WSAs are the only solid blocks of forested public land within a 60 mile radius of Wendover, Utah. The Goshute Mountains have historically been the main use areas for collecting fuelwood, posts, pinenuts, and Christmas trees for the Wendover community, as well as some residents in the Salt Lake Valley. Without legal public access onto the forested checkerboard lands, both individual persons and commercial interests living in the Wendover area and a small portion of the Salt Lake Valley population, would experience increased costs in gathering woodland products because of increased distances of woodland product availability. These increases in cost and time could be significant to these people.

Wilderness designation would have a significant adverse impact on the availability of pinyon pine Christmas trees. Currently, the harvest of open Christmas trees (both commercial and private) in the resource area is about 3500 yearly while demand is about 15,000. Goshute Peak WSA could provide about 600 trees per year on a sustained yield basis and would increase the resource area harvest by about 17 percent. The harvest of these 600 trees would be foregone under this alternative.

Domestic Livestock:

Table 14 displays livestock grazing information in the WSA.

Table 14

Allotment	Number of Permittees	Authorized Season of Use in Allotment	Actual Period of Use in WSA
Spruce 1/	3	Yearlong	Winter & Spring
White Horse Pass 2/	1	11/15-3/31	Winter
Lead Hills 2/	1	11/1-4/15	Winter
Utah/Nevada #1 2/	1	11/10-5/10	Winter & Spring

1/ All current use is by cattle
2/ All current use is by sheep

These animals generally graze in the lower elevations so that operators manage them via the border roads, the cherry-stemmed road, and ways that penetrate the WSA. With designation, livestock operators would generally be required to manage their livestock on horseback or foot while leaving their vehicles on border roads or at the terminal end of the cherry-stemmed road. The livestock operator in the Spruce Allotment would be slightly impacted by expending an additional eight hours of yearly labor if the area is designated wilderness to manage livestock by non-motorized means. Designation would not affect the other operators with allotments located within the wilderness area.

The limiting factors for range improvements or increasing the amount of AUMs in the WSA is the availability of water and the steep topography. No range improvements are proposed in the WSA.

Large amounts of forage nearby but outside the WSA are available to livestock for their use. Also, there is little local or regional economic dependence on livestock grazing in the Goshute Peak WSA. Therefore, there are no significant livestock management values foregone or adversely affected as a result of wilderness designation.

Recreation:

The wilderness area, representing about 1.6 percent of the resource area, would be closed to ORV use upon designation by Congress. This would slightly reduce opportunities to enjoy motorized recreational activities while slightly

enhancing the opportunities for primitive and unconfined recreational activities. Neither of these impacts are considered significant.

Mule deer and chukar hunting are available in the WSA and are considered fair (see Table 10). Other areas such as the foothills of the Ruby and East Humboldt Mountains and O'Neil Basin are considered better areas in the district for these activities. The potential for increasing the deer and chukar populations in the WSA is limited by the availability of water sources.

The border roads, R-1, and W-1, 10, 15, 25, 26 and 27 are utilized by deer hunters (see Map 6). The closure of the ways to the general public would slightly reduce the number of hunters in the area. However, those who did hunt would experience an increased quality of hunt because of fewer people. Therefore, overall, there are no hunting values foregone or adversely affected as a result of wilderness designation.

Currently, recreation use is estimated at 800 visitor days per year in the WSA. Without wilderness designation this use is expected to increase to about 1500 visitor days. With designation the recreation use is estimated to be about 3000 visitor days per year. Therefore, the loss of hunter days expected would be made up for by increased use by backpackers and hikers.

Wilderness:

In this alternative the wilderness resource would receive maximum protection which would ensure the wilderness integrity of most of the area would be maintained. It would not, however, prevent some adverse impacts on 4185 acres that are expected to lose wilderness character over time.

In particular, mining activity is likely to occur around the Ferguson Mining District, but only where a valid discovery occurs on a claim, located prior to designation. Loss of opportunities for solitude could be a temporary, short term impact, and some permanent loss of naturalness is inevitable, but the scale of operation would not likely be sufficient to permanently destroy the wilderness values of the entire area. However, development of claims just outside the southeast boundary of the wilderness area could have a significant adverse affect on the wilderness area.

Other impacts which would reduce wilderness values in the southeast portion of the area include unmanageable ORV use, sights and sounds of vehicles on Highway 93 and a right-of-way (see Manageability Section, Criterion No. 2).

Designation would serve to protect the wilderness values of the area from the impacts of additional mineral exploration and extraction, range development, woodland product harvest, and casual road building associatd with recreation. These would be significant beneficial impacts occurring in both the long and short terms.

Cultural Resources:

Wilderness designation would protect the archaeological resources in the area because access to cultural resource sites would become more difficult. This

would reduce the occurrence of vandalism and allow archaeological sites to retain their integrity for a longer period of time. An estimated 990 open aboriginal, 60 rock shelters and 50 historic sites would be afforded added protection with designation.

Watershed:

All watershed areas, including the 572 acres of high erosion potential watershed (see Map 6), would be protected from future deterioration if they were located within a designated wilderness area. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment in mineral exploration and development would be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases sediment production.

Wildlife:

In general, big game habitat would be protected by wilderness designation because future developments destructive to habitat would not occur and the closure of ways to vehicle traffic would minimize wildlife harrassment. Wilderness designation could allow construction of guzzlers and prescribed burns for wildlife to enhance escape routes for bighorn sheep. Restricted development would be especially beneficial to lambing of bighorn sheep if they are reintroduced into a wilderness area.

The 7,000 acres of antelope yearlong habitat could possibly be improved to a fair condition with improved range management along the benches. With designation, habitat development and improvement projects would probably be implemented in the wilderness area to enhance bighorn sheep habitat. Thereby, increasing opportunities for their reintroduction. In addition, portions of the 62,000 acres of historic bighorn sheep yearlong habitat could be improved to a fair condition. Neither the crucial deer winter range nor the deer yearlong range within the WSA is significant enough to require special management at this time. Therefore, the 4,675 acres of deer winter range would remain in a good condition and the 21,500 acres of deer yearlong range would remain in an unknown condition as no wildlife improvement projects are proposed.

Migrating raptors and roosting bald eagles would also be protected by wilderness designation because of restricted development.

Lands:

The southern border of the wilderness area would include the western halves of two right-of-ways; a powerline and Alternative Highway 93. The wilderness area would, therefore, be a significant adverse impact upon the right-of-ways.

MIDRANGE AND PREFERRED ALTERNATIVE:

Minerals:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Approximately 3,400 acres with good mineral potential would be in the wilderness area while 2,000 acres with good potential would be outside the wilderness area. This would reduce the amount of good mineral potential in the wilderness area by 37 percent from the Resource Protection Alterntive. In addition, about 10 mining claims and 8,220 acres leased for oil and gas would be located within the wilderness area. This represents a decrease of 50 percent in mining claims and 36 percent of acres leased for oil and gas in the wilderness area from the Resource Protection Alternative

Woodland Products:

Impacts are the same as the Resource Protection Alternative.

Domestic Livestock:

Impacts are same as the Resource Protection Alternative.

Recreation:

Impacts are the same as the Resource Protection Alternative with the following exceptions.

Wilderness:

Impacts are the same as the Resource Protection Alternative with the following exception.

Under this alternative, wilderness values would be maintained on 65,585 acres and lost on 4,185 acres over the long-term (see Manageability Section - Criterion No. 2).

A proposed corridor would be located within the southeastern boundary of the wilderness area and would significantly impact the naturalness and solitude of this portion of the area in the Mid-Range Alternative. However, in the Preferred Alternative, the corridor would be located outside the Wilderness Area and would not impact wilderness values (see corridor section of RMP).

Cultural Resources:

Impacts would be similar to the Resource Protection Alternative with the following exceptions.

Site total projections indicate the presence of about 895 open aboriginal, 56 rock shelters, and 45 historic sites within the wilderness area.

Watershed:

Impacts would be the same as the Resource Protection Alternative.

Wildlife:

Impacts would be the same as the Resource Protection Alternative with the exception of antelope yearlong habitat; only 3500 would be located within the wilderness area.

Lands:

Under this alternative there would be no impacts to the right-of-ways as their western boundaries would form the southeastern boundary of the wilderness area.

RESOURCE PRODUCTION ALTERNATIVE:

Minerals:

There would be very few impacts to minerals under this alternative as all of the mining claims, acres leased for oil and gas and acres of good mineral potential would be eliminated from the wilderness area. The entire wilderness area would possess low potential for all minerals.

Woodland Products:

Under this alternative 41,150 acres of woodland products would be in the wilderness area. These 41,150 acres could provide about 550 Christmas trees per year on a sustained yield basis; increasing the resource area harvest by about 16 percent. Therefore, the significant adverse impacts of harvest forgone would be reduced from the Resource Protection, Midrange, and Preferred Alternatives.

Domestic Livestock:

Motorized access for livestock operators would be greatly enhanced along the boundary of the study area as 14 miles of ways, eliminated from the wilderness area boundary, could be used to manage livestock. This would mean that no additional hours of yearly labor would be needed in the Spruce Allotment to manage livestock with motor vehicles.

Recreation:

Approximately 45,618 would be closed to ORV use with wilderness designation. Motorized recreational access would be enhanced from the Resource Protection, Midrange, and Preferred Alternatives as 14 miles of ways and 24,152 acres, eliminated from the wilderness area, would remain open for ORV use. Opportunities for primitive non-motorized recreation would be reduced from the Resource Protection Alternative.

Wilderness:

Impacts are similar to those of the Resource Protection Alternative with the following exception.

Wilderness values would be maintained on 45,618 acres and lost on 24,152 acres over the long-term.

Cultural Resources:

Impacts are similar to those of the Protection Alternative with the following exceptions.

Site total projections under this alternative indicate the presence of about 70 open aboriginal, 50 rock shelters, and 40 historic sites within the study area.

Watershed:

Impacts are the same as the Protection, Midrange and Preferred Alternatives.

Wildlife:

Impacts would be similar to those of the Protection Alternative with the following exceptions.

About 800 acres of antelope yearlong range would be in poor condition, 21,000 acres of deer yearlong range in an unknown condition, 3,375 acres of deer winter range in a good condition and 57,800 acres of historic bighorn sheep range in a fair to good condition.

Lands:

Impacts are the same as the Midrange and Preferred Alternatives.

Standard No. 3: Impacts of Nondesignation on Wilderness Values (and Other Resources)

NO ACTION (NO WILDERNESS)

Other than wilderness, no new designation for the WSA is anticipated. The WSA area currently forms the southern half of the Goshute Mountain Wild Horse Herd Management Area. Livestock grazing, hunting and woodland product harvest take place along ways at the lower elevations.

Wilderness:

In the event of non-designation, the wilderness characteristics of the WSA would probably be affected by mineral exploration and extraction, range improvements, and the harvesting of woodland products. Impacts resulting from ORV use at the lower elevations could also impact the wilderness character over time. The significance of these impacts cannot be predicted accurately as most are only potential impacts.

Only the most rugged and steep topographic portions of the WSA are anticipated to retain their wilderness character over the long-term. An estimated 3,000 acres along the ridgeline would maintain their naturalness over the long-term. However, opportunities for solitude or primitive and unconfined recreation would be lacking in such a small, linear area.

Minerals:

There would be no adverse impacts to minerals under the No Action Alternative as all mineral and energy exploration and development would be managed under existing applicable laws and regulations governing such activities on the public lands.

Woodland Products:

There would be no adverse impacts to woodland products under the No Action Alternative.

Domestic Livestock:

Range Improvements would continue to be planned, analyzed through an environmental assessment, and implemented, throughout the resource area. No restrictions on the method of access into the area would be implemented.

Recreation:

Approximately 99 percent of the resource area, including the Goshute Peak WSA would remain open for motor vehicle use. Current recreation use within the WSA would continue and may increase over the long-term. The result would be the establishment of new vehicle routes over the long-term.

Cultural Resources:

Management and protection of cultural resources would continue to be guided by all of the applicable laws affecting these resources. An adverse effect of this alternative is that cultural resources would not be afforded the added long-term resource protection provided by wilderness designation.

Watershed:

Proposed activities would continue to be handled on a case-by-case basis to protect watersheds from excessive erosion. An adverse effect of this alternative is that watersheds, including the area with high erosion potential, would not be afforded the long-term resource protection provided by wilderness designation.

Wildlife:

An adverse effect of this alternative is that wildlife habitat would not be afforded the long-term resource protection provided by wilderness designation.

Due to potential mineral and energy exploration and development, as well as an increase in off-road vehicle use. About 22,000 acres of deer yearlong, 1,450 acres of deer winter, 5,700 acres of antelope yearlong and 12,650 acres of potential bighorn sheep habitat are expected to decline over the long-term. The potential to reintroduce bighorn sheep into the area would essentially be lost under this alternative.

Lands:

No impacts to lands are expected.

Standard No. 4: Public Comment

Comments received throughout the initial and intensive inventories and associated protest periods included 31 that supported WSA classification because of the outstanding quality of the area. Of the 11 that disagreed six said the area contained roads; two mentioned the area's oil and gas and mineral potential; and three said the area lacked outstanding characteristics. Protests were received from five individuals or agencies. These centered around the use of cherry-stemmed roads and criticism of BLM wilderness personnel.

GOSHUTE PEAK
WSA MAPS

Comments received during the RMP scoping process were also generally from those either opposing or supporting wilderness designation of the WSA. One faction expressed concern for withdrawl of the area from mineral entry exploration, and development and felt that taking these areas out of production will hamper America's greatness. The other group mentioned the fact that the Elko District designated very few WSAs in comparison to other districts and that it was, therefore, particularly important that these areas to be included in wilderness recommendations.

Standard No. 5: Local, Social and Economic Effects

The Goshute Peak WSA is utilized by six individuals for livestock grazing. Even though a very small percentage of their businesses are based economically on the lands within the WSA, the social aspect of the ranching way of life is very important to these ranchers and Elko County as a whole.

The opportunity for an individual or a company to prospect, locate minerals and/or explore for oil and gas is also held in great regard by the residents of Elko County. Therefore, many local people philosophically disagree with wilderness designation because it would, in most cases, restrict or preclude such actions.

The local economy is based to a large degree on mining of hard rock minerals, especially gold and barite. The discovery of these or other minerals with economic value in the WSA could have a significant beneficial economic impact upon the county. However, such an impact, and conversely the loss of such a discovery through wilderness designation, is a potential impact at this time.

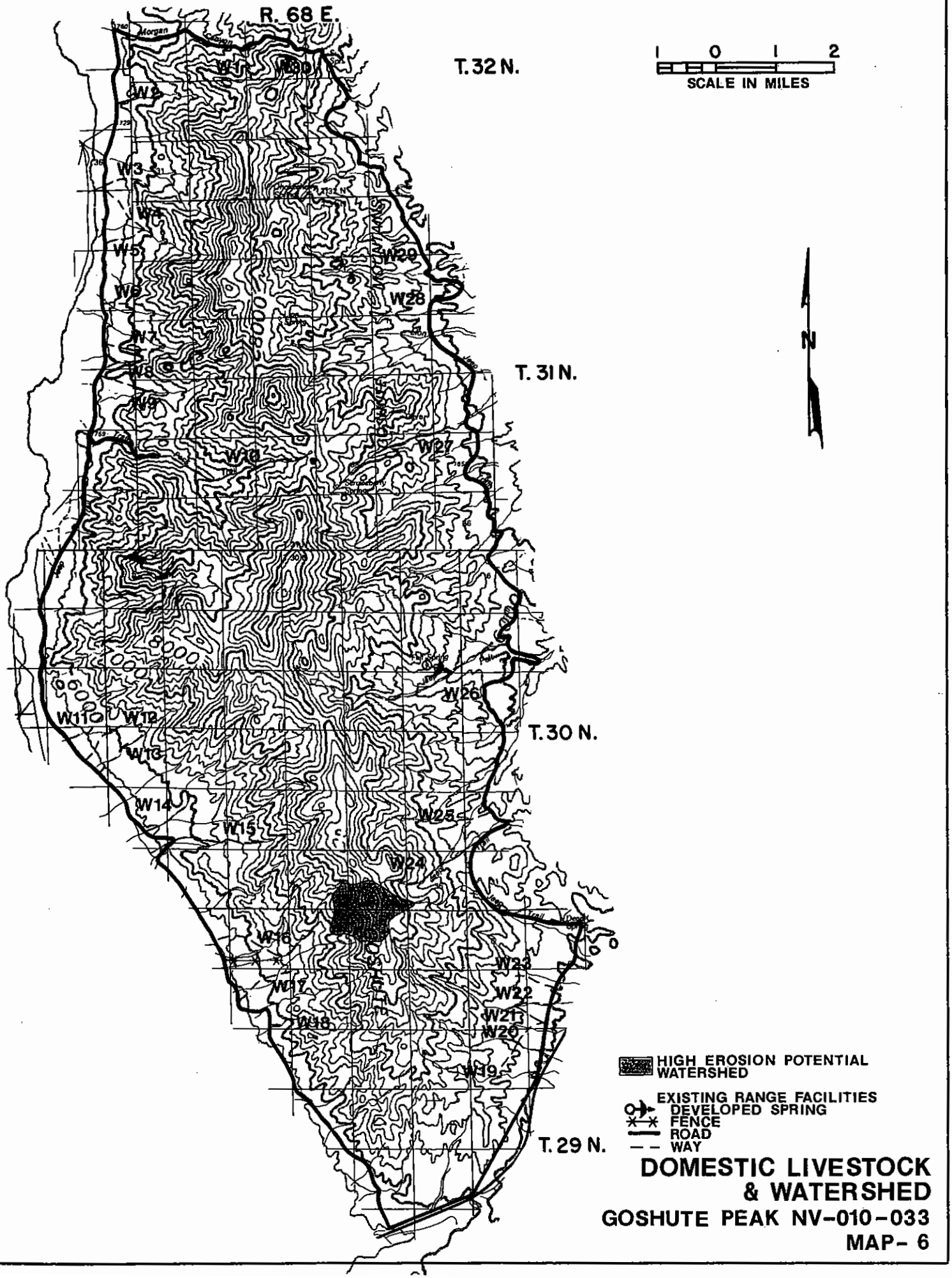
Using a $10.00 value, the user day benefits per year from the Goshute Peak WSA in the future without designation are estimated at $15,000 whereas with designation they would be about $30,000. The expenditures, income, and employment associated with these benefits are insignificant to the local economy.

Standard No. 6: Consistency with Other Plans

Wilderness designation is consistent with the FLPMA, the Nevada Statewide Comprehensive Outdoor Recreation Plan (SCORP) dated August 6, 1982, and the General Plan for Elko County dated June 1971. For example the SCORP says that the State of Nevada should:

1. Preserve a representative cross section of Nevada's roadless, undeveloped areas in wilderness; and

2. Offer positive support to federal agencies charged with recommending areas for inclusion in the National Wilderness Preservation System.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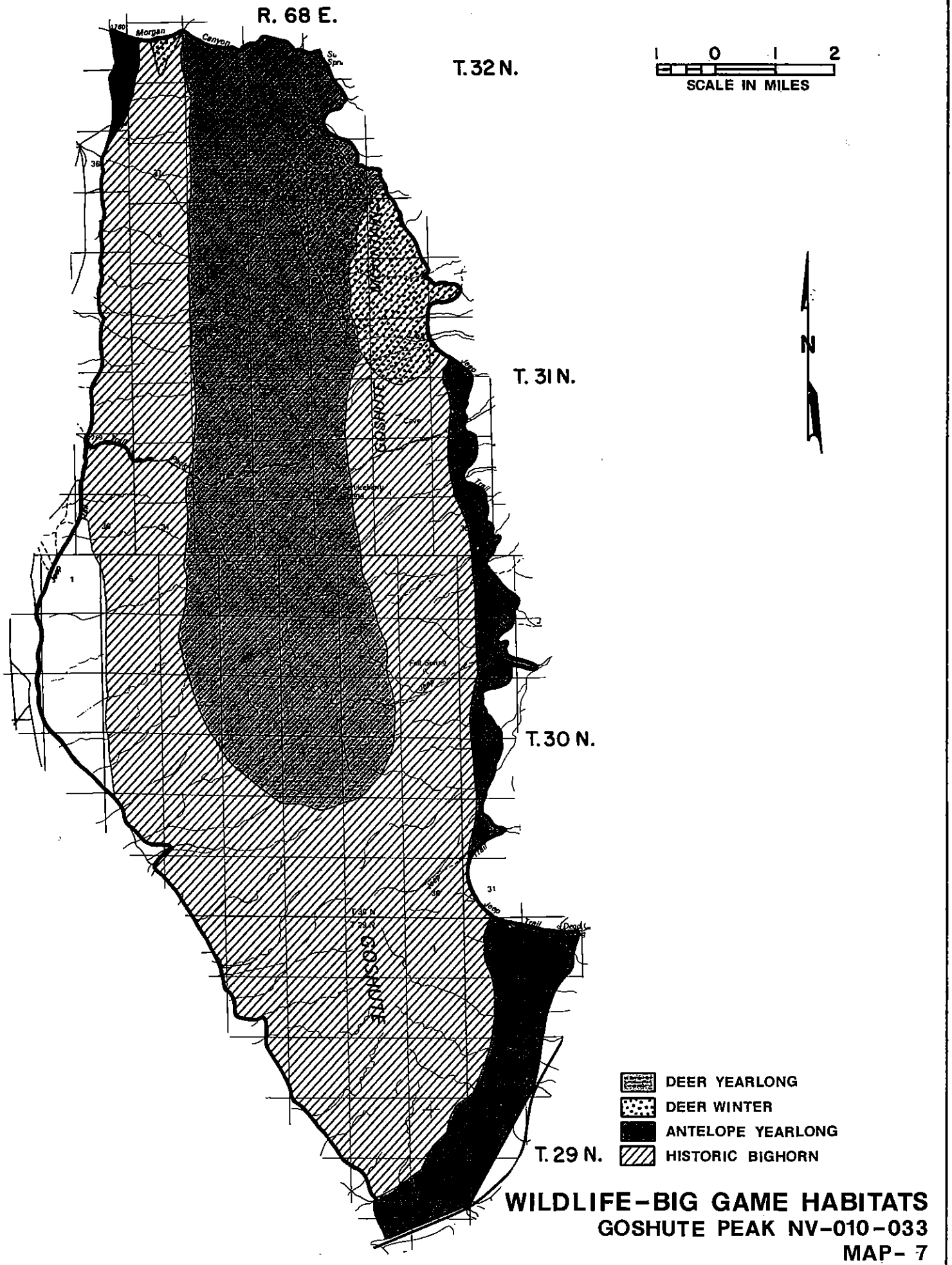
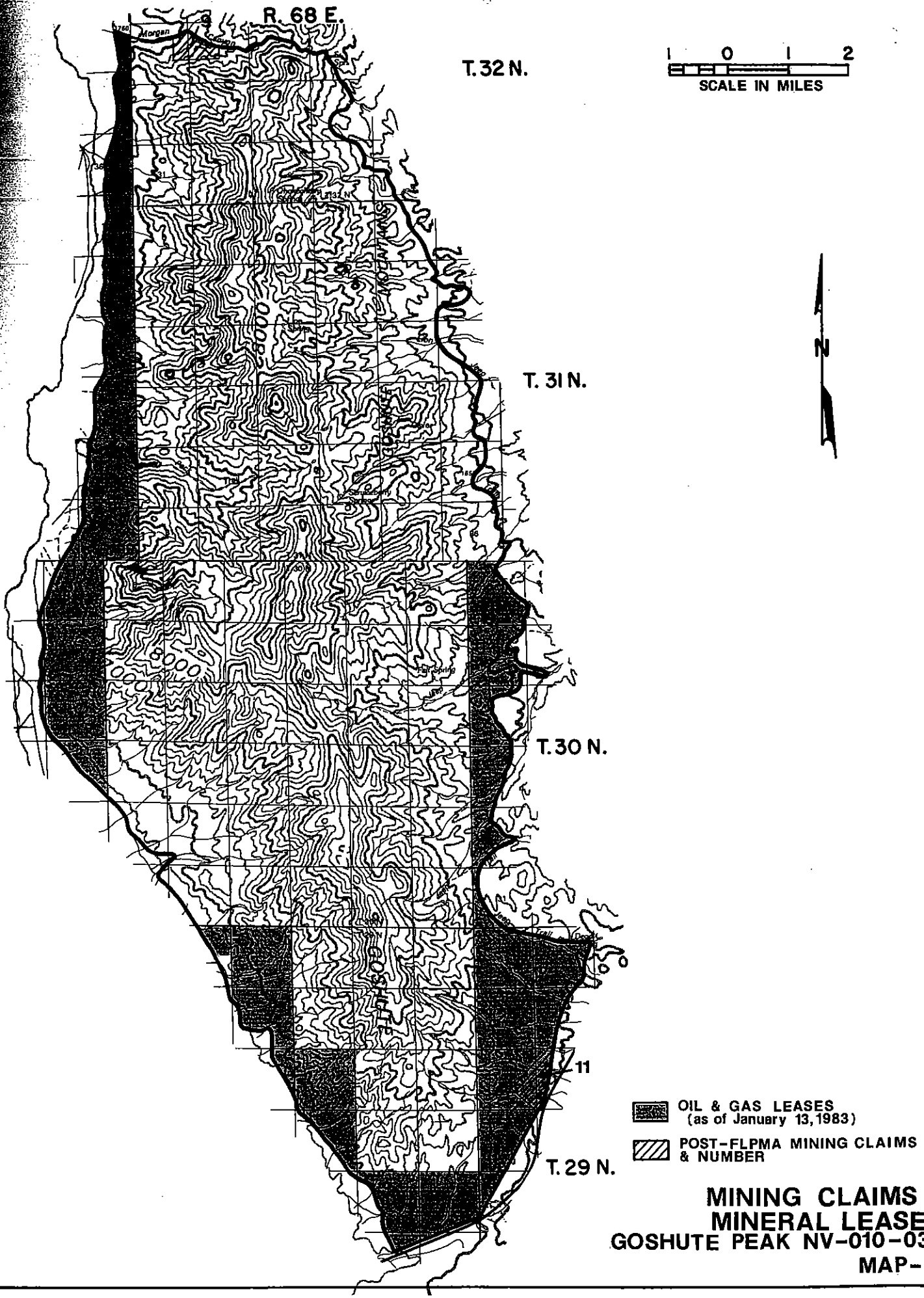
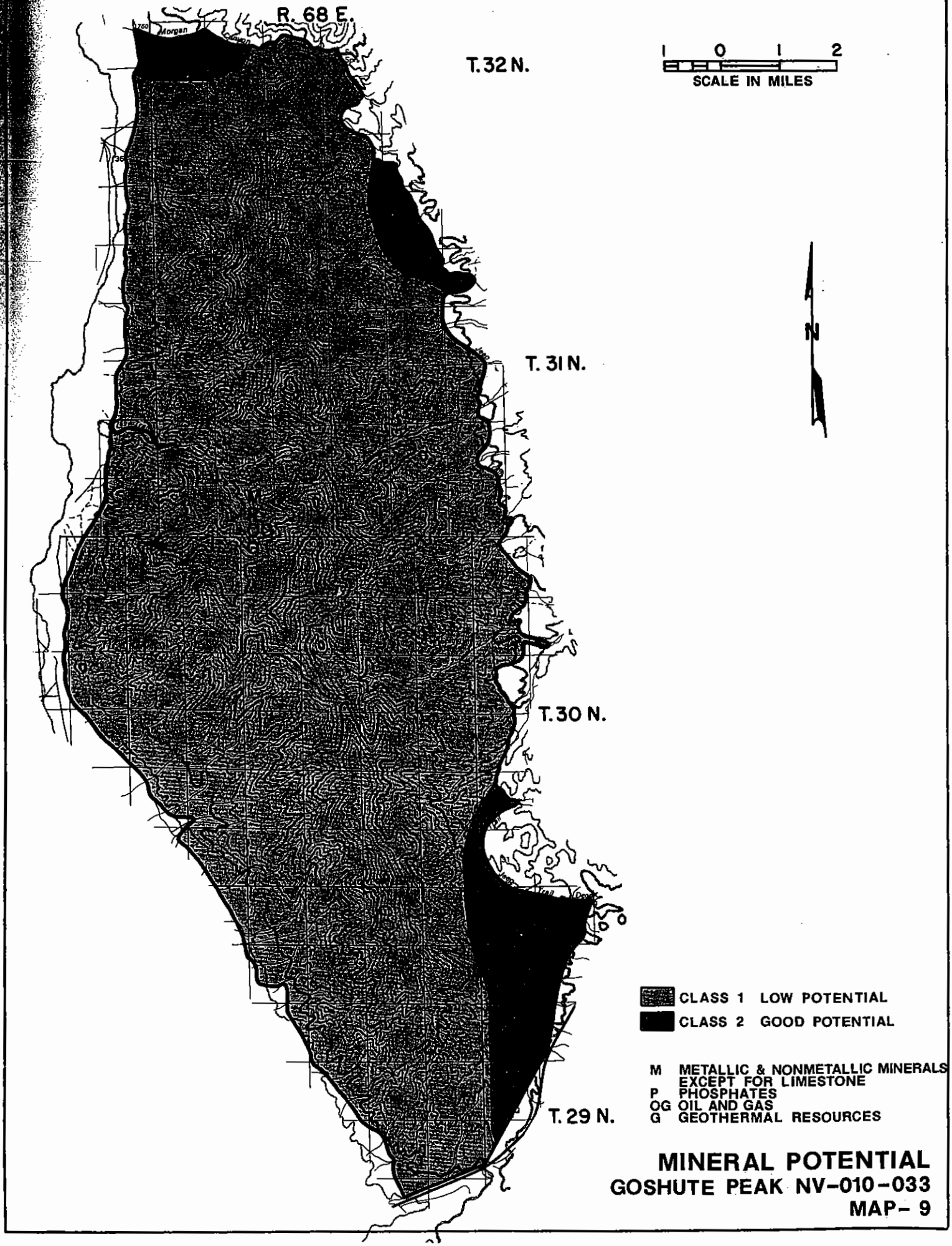
HIGH EROSION POTENTIAL WATERSHED
EXISTING RANGE FACILITIES
DEVELOPED SPRING
FENCE
ROAD
WAY
DOMESTIC LIVESTOCK & WATERSHED
GOSHUTE PEAK NV-010-033
MAP- 6



WILDLIFE-BIG GAME HABITATS
GOSHUTE PEAK NV-010-033
MAP- 7



MINING CLAIMS & MINERAL LEASES
GOSHUTE PEAK NV-010-033
MAP- 8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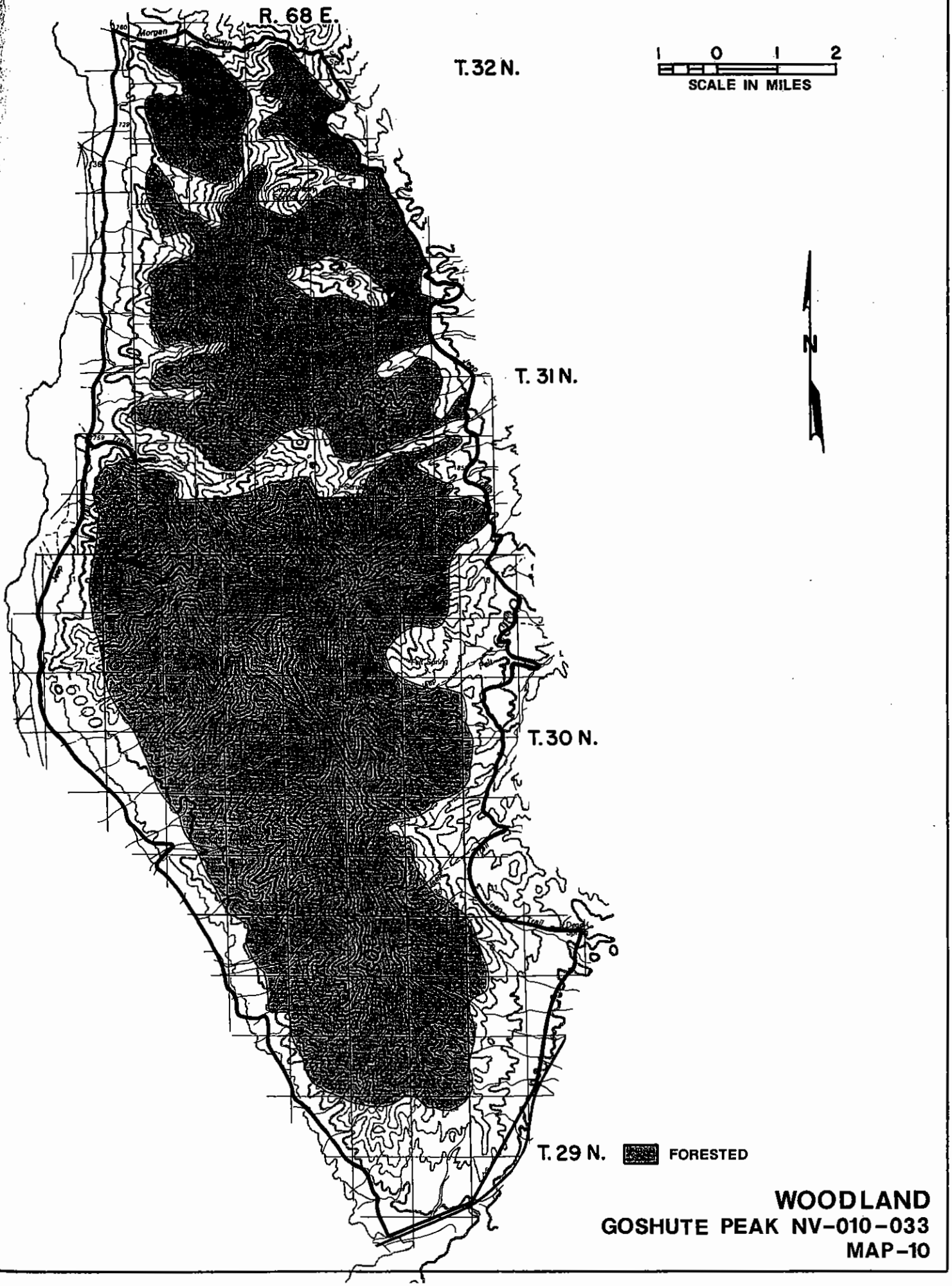
CLASS 2 GOOD POTENTIAL
M METALLIC & NONMETALLIC MINERALS EXCEPT FOR LIMESTONE
P PHOSPHATES
OG OIL AND GAS
G GEOTHERMAL RESOURCES
MINERAL POTENTIAL
GOSHUTE PEAK NV-010-033
MAP- 9



WOODLAND
GOSHUTE PEAK NV-010-033
MAP-10

SOUTH PEQUOP WSA

The South Pequop WSA is located approximately 45 miles southeast of Elko, Nevada in the southern portion of the Pequop Mountains (see location map, Wells RMP). The WSA is mountainous and moderately forested. Uses of the area include harvesting woodland products, livestock grazing, mineral exploration and recreation.

Table 15 shows the acres of the South Pequop WSA recommended as preliminarily suitable and non-suitable for wilderness designation by alternative.

Table 15

South Pequop WSA

	Resource Protection	Midrange & Preferred	Resource Production	No Action
Suitable Acres	41,090	37,573	-0-	-0-
Non-suitable Acres	-0-	3,517	41,090	41,090
% WSA Suitable	100	91.4	-0-	-0-
% Wells RA Suitable	1.0	0.9	-0-	-0-

Criterion No. 1: Evaluation of Wilderness Values

Wilderness values i.e., naturalness, outstanding opportunities for solitude and primitive and unconfined recreation, and special features would be maintained on approximately 37,537 acres and lost on approximately 3,517 acres over time with wilderness designation (see Criterion No. 2: Manageability) under the Midrange and Preferred Alternatives.

Component No. 1: Quality of the Area's Mandatory Wilderness Characteristics

A. Naturalness

The 41,090 acre WSA contains relatively few man-made improvements for its size. There are 15 ways totalling 20 miles and 5 cherry-stemmed roads totalling 10 miles which penetrate the area (see Map 11).
These routes trend from the low elevation borders of the WSA to its high elevation interior and are utilized by livestock grazing operators and recreationists. With designation, the ways would be closed to motorized use and are expected to rehabilitate naturally over time.

A bench mark is located atop the 8,952 peak in Section 10 of T. 32 N., R. 65 E., and a well and trough for livestock use are found at the terminal end of R-4. A few prospect pits are located along the border road near the top of the ridgeline in sections 27, 28, 29, and 30 of T. 31 N., R. 65 E.

Several portable troughs used for watering livestock are located just outside the WSA. Seven are located along the Nine Mile Canyon border road and R-1 and another is found at the terminal end of R-4.

These impacts are separated by large distances and are substantially unnoticeable in the WSA.

B. Outstanding Opportunities for Solitude and Primitive and Unconfined Recreation

1. Solitude

The 41,090 acre WSA is slightly smaller than the majority of existing wilderness areas. It is U-shaped and measures about 12 miles by 4 miles.

The topography of the WSA is comprised of the Pequop Mountains bordered on the east and west sides by Steptoe and Independence Valleys respectively. The mountainous portions range from 6,200-8,952 feet and comprise about 32,000 acres, whereas the lowlands range from 5,640 to 6,200 feet and consist of about 9,090 acres.

Thirteen drainages, averaging two miles in length, meander through fairly dense stands of pinyon pine, Utah juniper, white fir, limber pine and mountain mahogany to the valley floor. The drainages are generally steeper on the east side than the west, but all are passble on foot. The main ridgeline trends north-south and forms a rugged pathway ranging from 7,600 to 6,400 feet.

Vegetative screening in the WSA consists of areas with southern exposures covered with sagebrush and grasses to northern exposures with stands of white fir and limber pine. Pinyon pine, Utah juniper, and mountain mahogany also exists in many locations throughout the WSA.

Even though the topographic and vegetative screening do provide many areas of isolation, the configuration of the WSA is unusual and could hamper opportunities for solitude in some areas. The distance between the terminal end of the R-1 and the eastern border of the WSA is less than one mile. Vehicles traveling on R-1 could be seen from much of the ridgeline within the unit. North-south travelers would be forced to either cross R-1 or orient themselves through the narrow gap mentioned above. Persons in the middle portion of the WSA near R-1 would experience a lesser degree of solitude than possible elsewhere in the unit. However, as motorized use of R-1 is very low, the area is not recommended unsuitable for the above reasons.

In other portions of the WSA the combination of rugged, dissected topography with dense forest cover offer numerous secluded spots. Many of the canyons offer recreationists areas totally isolated from other portions of the unit. A traveler within the timbered zones of the mountain range would not be visible to other wilderness users.

Trains on the Western Pacific railroad tracks can be viewed and heard from the far northern end of the WSA. These can also be seen but not heard from northeast facing ridgelines. This impact is about 1 to 6 miles from recreationists and slightly diminishes the benefits of wilderness designation. This is partially responsible for recommending the entire WSA as nonsuitable for wilderness designation in the Resource Production Alternative.

2. Primitive and Unconfined Recreation

Activities available in the WSA include backpacking/camping, hiking, horseback riding, hunting, wildlife observation, sightseeing/photography, and fossil collecting.

Backpacking/camping: The size of the WSA does not lend itself to extensive trips but excursions of two or three days could be enjoyed. Backpacking would be enjoyable, especially along the ridgeline and within the unit's drainages. The drainages are not exceptionally steep and level and sheltered ground can be found for campsites. Game and wild horse paths provide good trails but water is not readily available and should be carried.

Hiking: Excellent opportunities for hiking are available along the ridgelines and canyons of the WSA. The east-west drainages afford challenging and rewarding hikes varying in length from 2 to 8 miles from the lower slopes to the highest ridgeline. Most of these canyons are devoid of evidence of previous travelers.

Horseback riding: The fact that slopes are not extreme in the WSA and that vegetation is not overly dense throughout results in a high quality horseback experience. One drawback, however, is the lack of water availability in the WSA. Another is that the areas moderate size would mean that a horseback trip would be of short duration. Lower Boone spring, located just outside the southeast boundary of the WSA, could be used to water horses.

Hunting: Fair to good hunting can be expected in the WSA for mule deer. Vegetative cover is not as dense as in the Bluebell and Goshute Peak WSAs, resulting in better hunting opportunities with more open shots. Portions of the WSA are considered both winter and yearlong habitat for mule deer. Table 16 displays deer hunting information for hunting management unit 105 which includes the South Pequop WSA.

Table 16
MULE DEER HUNTER DAYS (General Season)

Hunting Unit	1981	1980	1979	1978	1977
Management Unit 105 (includes South Pequop WSA)	167(a) 671(b)	123 592	111 503	73 291	79 342

(a) = Number of hunters.
(b) = Days spent hunting.

Source: Nevada Department of Wildlife (NDOW), 1982.

Wildlife Observation: This activity would not be a primary reason for a visit to the area. The most probable animals to be viewed in this WSA, as in many other portions in the resource area, are mule deer, reptiles, rodents, and birds. The opportunity for wildlife observation in the WSA is fair. Table 18 displays fauna in the South Pequop WSA.

Sightseeing/photography: These activities are considered moderate in the WSA. The topographic diversity and forested condition of the WSA are good but not exceptional photographic subjects. A few bristlecone pine can be found which make excellent photographic subjects as do wild horses and concentric limestone formations in the northwest portion of the WSA. Other photographic subjects include the Ruby, Spruce and Goshute Mountains.

Fossil Collecting: Abundant invertebrate fossils are found weathering out of the limestones and shales. Fossils are most commonly found in freshly eroded areas near roadcuts, cliffs, and ephemeral streams. Recorded specimens collected from this WSA include stirferid, atrypid, rhynchonellid, and productid brachiopods. Mollushs found include platyostomes, polygyras, crepidula, and ammonities. These fossils are valuable to the scentific community as well as to the amateur collector.

Component No. 2: Special Features: Quality of the Area's Optional Wilderness Characteristics

Ecological: The WSA does contain a diversity in flora and fauna but not to the extent of the Bluebell or Goshute Peak WSAs. Table 17 is a listing of the grasses, forbs, shrubs, and trees observed in the South Pequop WSA while Table 18 displays fauna.

Geological: Fossils exist in the WSA and are generally invertebrates, with a large variety of brachiopods, corals, bryozoans, and trilobites to be found. A number of rare and unusual fossil species occur in the WSA.

Scenic Value: From atop the ridgeline of the Pequop Mountains, the Deep Creek Mountains of Utah can be seen, as well as the Goshute, Cherry Creek, Ruby, and East Humboldt Mountain Ranges. Vistas of up to 70 miles to Ely, Nevada greatly enhance the feeling of isolation and solitude within the WSA. Bristlecone pine and the diverse vegetative covered terrain also add to the scenic quality of the WSA. The twisted trunks of the bristlecone pine make excellent photographic subjects in the daytime as do their silhouettes in the evening.

Archaeological: Because of the great expense involved, only about one percent of the resource area lands have been inventoried for archaeological resources. The site inventory data available was used for making statistical predictions of archaeological site totals projected for the WSA. These projections indicate the presence of about 630 open aboriginal, 10 rock shelters and 40 historical sites within the WSA.

South Pequop WSA
Table 17

FLORA

Grasses	Forbs	Shrubs
Bluebunch Wheatgrass	Phlox	Cliffrose
Sandberg's Bluegrass	Sedge	Big Sagebrush
Junegrass	Locoweed	Winterfat
Idaho Fescue	Stickseed	Little Rabbitbrush
Squirreltail	Hood's Phlox	Low Sagebrush
Needle-and-thread	Tansymustard	Shadscale
Nevada Bluegrass	Stoneseed	Greasewood
Basin Wild Rye	Groundsel	Big Sagebrush
	Arrowleaf Balsamroot	Spiny Horsebrush
Trees	Daisy	Spiny Hopsage
	Biscuitroot	Serviceberry
Pinyon Pine	Penstemon	Snakeweed
Utah Juniper	Indian Paintbrush	Nattall's Saltbrush
Rocky Mtn. Juniper	Bluebells	Ephedra
Curlleaf Mtn. Mahogany	Cryptantha	
White Fir	Longleaf Phlox	
Bristlecone Pine	Deathcamas	
	Hawksbeard	
	Stonecrop	
	Bastard Toadflax	
	Halogeton	
	Russian Thistle	
	Globemallow	
	Pricklypear Cactus	
	Strawberry	
	Goldenrod	
	Skeletonweed	
	Mustard	

South Pequop WSA
Table 18

FAUNA

Mammals	Reptiles	Birds
Wild Horse	Western Fence Lizard	Golden Eagle
Pronghorn Antelope	Great Basin Horned Lizard	Red-tailed Hawk
Mule Deer	Gopher Snake	American Kestral
Great Basin Gopher		Purple Finch
		Red-shafted Flicker
		Meadowlark
		Black-Throated Sparrow
		Rufous-sided Towhee
		Green-Tailed Towhee
		Mountain Bluebird
		Rock Wren
		Mountain Chickadee
		Bald eagle (potential)

Historically, two groups of Shoshone were known to have camped in or just outside the WSA at the foot of the Pequop Mountains. Three of four families known as Kubadoogwe lived on the west side of the Pequops probably scattered along Cole and Latham Creeks. Another group of about six families lived on the eastern slopes of the Pequops in a village called Biabaduzep. They were known as Wadaduka and were under a herdman named Winjuganbaduzep. A third group located south of the WSA traveled to Biabaduzep for festivals.

These people were semi-nomadic, making seasonal rounds to the surrounding valleys collecting food which they brought back to the winter villages. Seeds, root-crops, and small and large game were their main staples. Hunting, trapping, and gathering camps are expected to be found in the mountains. More permanent winter villages would be expected at the foot of the mountains.

Euro-American activities within the WSA were probably limited to cattle ranching, hunting, and mining plus some possible support work for the railroad. John Fremont, an early trapper and explorer, was the first known Euro-American to travel through the area. His party crossed the summit in 1845 (along the northern boundary of the WSA). The ill-fated Donner Emmigrant Party later followed this same route which became known as the Hastings Cuttoff of the California Trail. The Western Pacific Railroad cut a tunnel in this same area while constructing their line which was completed in 1909.

Scientific and Educational Values: The Spruce-Pequop Wild Horse Herd Management ~~Use~~ Area includes the WSA. There are about 80 wild horses in this area so a visitor who remains a day or two will generally see wild horses. Also of interest also are the bristlecone pine (Pinus aristata) found in the WSA which are the same as those found in the Wheeler Peak Scenic Area near Ely, Nevada, but are younger and smaller. These unique trees greatly enhance the visitor's experience because of their old age and gnarled appearance.

Component No. 3: Multiple Resource Benefits: The Benefits to Other Multiple Resource Values and Uses Which Wilderness Designation of the Area Could Ensure

A. Values that already exist:

Wilderness designation could ensure that the naturalness, outstanding opportunities for solitude and primitive and unconfined recreation, special features, and other resource values in the WSA would be maintained or enhanced over time.

Wilderness designation would generally protect the archaelogical resources in the WSA. Because of vehicular restrictions, access to cultural resource sites would become more difficult. This would reduce the occurrence of pot hunting and allow archaeological sites to retain their integrity for a longer period of time.

Wilderness designation would assure that wild horses would receive less harassment from vehicles. Closure of ways to vehicular access would provide more untraveled areas in which the horses could roam unmolested.

Watersheds in the WSA would be protected from future deterioration if designation occurred. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment in oil and gas exploration and development would be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases in sediment production.

In general, big game habitat would be protected by wilderness designation as future developments destructive to habitat would not occur and closure of ways to vehicle traffic would minimize wildlife harrassment. Map 12 displays big game habitat in the WSA. Currently, there are approximately 8,600 acres of mule deer yearlong habitat in an unknown condition and 7,000 acres of deer winter habitat in a fair condition in the WSA.

On January 10, 1983, a wintering bald eagle communal roosting area was identified on the southwestern side of Spruce Mountain. Based upon previous field investigations, literature reviews, and reports addressing wintering bald eagle habitat, prepared by the District biologists, potential roosting areas are strongly suspected to exist in the southwestern portion of the Pequop Mountains. Therefore, the potential exists for future discovery in the WSA of this species.

Noticeable intrusions created by development such as powerlines, roads, and gravel pits would not be allowed in the WSA, thereby protecting its scenic quality.

B. Values That Do Not Now Exist

There are no known resource values that do not now exist in the WSA which

wilderness designation could ensure.

C. Benefits to Areas Outside the Wilderness Study Area

The scenic quality of the area as viewed from outside the WSA, particularly from Independence and Steptoe Valleys, would also be protected with designation.

Component No. 4: Diversity in the National Wilderness Preservation System

Factor No. 1: Expanding the diversity of natural systems and features, as represented by ecosystems and landforms.

Refer to Table 5 on Page 17 and Factor No. 1 on Page 16.

Factor No. 2: Accessing the opportunities for solitude or primitive recreation within a days driving time (five hours) of major popuilation centers.

Refer to Table 6 on Page 18 and Factor No. 2 on Page 16 (Provo, Utah SMSA only).

Factor No. 3: Balancing the geographic distribution of wilderness areas.

Refer to Factor No. 3 on Page 17.

Criterion No. 2: Manageability

The South Pequop WSA is a solid block of public land. There are no private inholdings or state lands within its border. No mining claims exist but 15 oil and gas leases comprising 18,600 acres and 7 Desert Land Entry (DLE) applications totalling about 720 acres are located generally around the perimeter of the WSA (see Map 13). No discoveries of ore have been reported and no drilling has taken place. Some seismic testing has occurred in the WSA (two lines trending east-west).

Map 11 depicts the roads and ways in the South Pequop WSA. The border roads and the ways leading to the interior of the WSA are utilized for vehicular access by livestock operators, recreationists, and others. All roads (R-1 to R-4) would remain open for all publics whereas all ways (W-1 to W-15) would be closed to vehicular traffic after designation.

The mid-eastern border of the WSA is formed by private land in sections 1 and 12 of T. 32 N., R. 65 E. and sections 17 and 18 of T 32. N., R. 66 E. Direct access to these lands from the eastern border road cannot be guaranteed in the future. However, these lands are accessible indirectly on horseback or foot from the terminal ends of R-1 and R-5.

For several reasons 3,517 acres along the eastern border of the WSA are unmanageable as a wilderness area. First, a portion of the eastern border is formed by private land in sections 17 and 18 of T. 32 N., R. 65 E. No change in use is expected in the near future on these lands. However, to avoid possible problems in the future with restricted access, any wilderness area boundary should be moved south. Second, the relatively gentle terrain of the 3,517 acres lends itself to potential vegetative manipulations such as seedings for livestock management purposes and unmanageable ORV use. Third, oil and gas leases and DLE applications cover much of this portion and are considered unmanageable. Fourth, 2,250 of the 3,517 unmanageable acres contain phosphates of good potential for exploration and development.

For the above reasons, the boundary of the manageable area is formed by deleting sections 17, 18 and a portion of section 16 (just inside the boundary of the WSA) of T. 32 N., R. 66 E, as well as those portions of sections 5, 6, 7, 18, and 19 of T. 31 N., R. 66 E. and portions of sections 13 and 24 of T. 31 N., R. 65 E.

The IMP Guidelines allow for implementation and development of various projects, (i.e., fences, prescribed burns,) in WSAs including the use of motorized equipment, if the non-impairment criteria are met. However, implementation of projects in a wilderness area generally restricted by the Wilderness Management Policy dated September, 1981 to non-mechanical means.

Wild horse gathering would continue so that numbers in the South Pequop Herd Management Area would be kept at the level determined by the Wells RMP. During gathering operations vehicular access would be allowed up cherry-stemmed roads to locate portable traps and remove captured horses. Helicopter flying over the wilderness area could also be allowed during the gathering procedures subject to stipulations in the Wilderness Management Policy.

The boundaries of the 37,573 acre portion of the WSA are identifiable and manageable (Mid-Range and Preferred Alternatives). Admittedly, some degradation of wilderness values would occur from illegal nonconforming uses. However, the area can generally be managed to maintain its wilderness character over the long-term.

QUALITY STANDARDS

Standard No. 1: Energy and Mineral Resource Values

Mineral potential classification definitions are shown in the Bluebell WSA analysis on Page 20.

Mineral potential has been estimated on the basis of the Wells MRI, company responses to a request for input, available literature, and the contract GEM assessment of WSAs. Table 19 shows the potential for metallic and non-metallic minerals, phosphates, oil and gas, and geothermal resources in the South Pequop WSA. Map 14 displays these by location.

Table 19 shows the potential for metallic and non-metallic minerals, phosphates, oil and gas, and geothermal resources in the South Pequop WSA.

Table 19

South Pequop WSA Mineral Potential Acres

	Potential		
	High (3)	Medium (2)	Low (1)
Minerals (M)	-0-	500	40,590
Phosphates (P)	-0-	16,363	24,727
Oil & Gas (OG)	-0-	-0-	41,090
Geothermal (G)	-0-	-0-	41,090

Source: GEM Assessment, February, 1983.

Rocks cropping out in the WSA are chiefly of Ordovician through Triassic age, with limestone, shale, chert, siltstone, and sandstone being the dominant lithologies. Lesser amounts of Tertiary volcanoclastic rocks also occur.

The Spruce Mountain Mining District is about six miles west of the WSA and has been a past producer of considerable amounts of silver, copper, lead, and zinc. Occurrences of gold, barite, molybdenum, and tungsten have also been reported. Intrusive rock, which is key to the mineralization on Spruce Mountain, is not known to occur in the South Pequop WSA.

The Permain Phosphoria Formation is widespread in the WSA and is known to contain phosphate rock. Grade ranges from 10.5% P_2O_5 in a 32.5 foot bed to 20.2% P_2O_5 in a 6 foot bed. Typical grades of phosphate mined from the same formation in southern Idaho is 24% P_2O_5 in 40 foot beds.

Potential source and reservoir rocks for oil and gas occur under the WSA, however, most exploration and all production of oil and gas in Nevada has been concentrated in the more favorable intermontane areas, hense the low potential rating for oil and gas in the WSA. No oil or gas shows have been reported in wildcats drilled in the valleys around the Pequop Range. Portions of the WSA have been leased for oil and gas (see Map 13).

No geothermal features occur in the WSA.

Invertebrate fossil locations occur throughout the WSA. Marine fauns with brachiopods, corals, mollusks, and bryozoans of Pennsylvanian through triassic age are dominant.

Conclusions

1. There is no active mining or mining claims in the WSA.
2. Minor exploration of phosphate rock has taken place, but no mineral development has occurred in the WSA.
3. A small area (500 acres) along the northern boundary of the WSA has good potential for base metals.
4. Much of the WSA (40%) has good potential for phosphate rock, however, the phosphate beds are thin or of low grade and little interest has been expressed to date.
5. The WSA has low potential for all other mineral resources.

Standard No. 2: Impacts on Other Resources (Including Wilderness by Alternative)

RESOURCE PROTECTION (ALL WILDERNESS) ALTERNATIVE

Minerals:

The wilderness area would be withdrawn from all forms of mineral entry. This would preclude drilling in the area and the potential future discovery and development of energy resources would be foregone. Approximately 18,600 acres leased for oil and gas would be adversely affected. Mining claims would not be affected as there are no claims in the WSA. Loss of 500 acres, which has good base metal potential, to possible mineral development is considered a

non-significant impact. The possibile development of phosphate resources (16,363 acres), which is unlikely in the foreseeable future, would be foregone with wilderness designation.

Woodland Products:

The WSA contains 22,725 acres or four percent of the resource area's pinyon, juniper, and mahogany woodland products for Christmas trees, fuelwood, fence posts, and pinenut collection (see Map 15). With expected demand, sufficient quantities of trees exist elsewhere in the resource area so that wilderness designation would have no significant impact on the sustained yield management of fuelwood and fence post cutting or pinenut collection. However, designation would have a significant adverse impact on the availability of pinyon pine Christmas trees. Currently, the harvest of Christmas trees (both commercial and private) in the Wells RA about 3500 yearly while the demand is about 15,000. South Pequop WSA could provide about 400 trees per year on a sustained yield basis and would increase the resource area harvest by about 11 percent. The havest of these 400 trees would be foregone under this alternative.

Domestic Livestock:

Table 20 displays livestock grazing information in the WSA.

Table 20

Livestock Grazing Use in the South Pequop WSA

Allotment	Number of Permittees	Authorized Season of Use in Allotment	Actual Period of Use in WSA
Spruce 1/	3	Yearlong	Winter & Spring

1/ All current use is by cattle and sheep

Source: Livestock Grazing Cae Files: Wells Resource Area (January, 1983).

These animals generally graze in canyons such as Nine-mile and near crested wheatgrass seedings on the east and west sides of the South Pequop WSA and are managed by operators via the border road, cherry-stemmed roads, and ways.

With designation, livestock operators would generally be required to manage their livestock on horseback or foot while leaving their vehicles on border roads or at the terminal end of cherry-stemmed roads. This would slightly impact the Spruce Allotment operators by requiring an estimated additional four hours of labor yearly to manage livestock through non-motorized means.

There are no range improvements proposed in the WSA. The potential for developing new range improvements is severly limited due to the lack of water, the steep topography and the forested condition of the WSA.

The two limiting factors for increasing the amount of AUMs in the WSA are the sparse availability of water and steep topography. Large amounts of forage nearby but outside the WSA are available to livestock for their use. Also, there is little local or regional economic dependence upon livestock grazing in the South Pequop WSA. Therefore, there are no significant livestock management values foregone or adversely affected as result of wilderness designation.

Recreation:

If designated, the Wilderness Area, representing about 1.0 percent of the resource area, would be closed to ORV use. This would slightly reduce opportunities to enjoy motorized recreational activities while enhancing opportunities for primitive and unconfined recreation. Neither of these impacts are considered significant. Much of the WSA is accessible via the border road and the five cherry-stemmed roads.

Mule deer hunters primarily use the border road and the five cherry-stemmed roads which penetrate the WSA. The closure of ways to the general public if the area is designated wilderness, would slightly reduce the number of hunters in the area. However, those who did hunt would experience an increased quality of hunt because of fewer people hunting in the area. Therefore, overall, there are no hunting values foregone or adversely affected as result of wilderness designation.

Currently, recreation use is estimated at 150 visitor days per year in the WSA. Without wilderness designation this use is expected to increase to be about 300 visitor days. With designation, the recreation use is estimated at about 1,000 visitor days per year. Therefore, the loss of hunter days expected would be made up by increased use by backpackers and hikers.

Wilderness:

In this alternative the wilderness resource would receive maximum protection which would ensure the wilderness integrity of most of the area. It would not, however, prevent adverse impacts on 3517 acres that are expected to lose their wilderness character over time.

Designation would serve to protect the wilderness values of the area from the impacts of mineral exploration and extraction, additional range development, woodland product harvest, and casual road building associated with motorized recreation. These would be beneficial impacts occurring in both the long and short terms. Also see manageability section (Criterion No. 2).

Cultural Resources:

Wilderness designation would protect the archaeological resources in the study area because access to cultural resources sites would become more difficult. This would reduce the occurrence of vandalism and allow archaeological sites to retain their integrity for a longer period of time.

Watershed:

All watersheds would be protected from future deterioration in the wilderness area. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment in the development of mining claims, would

be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases in sediment production.

Wildlife:

In general, big game habitat would be protected by wilderness designation as future developments destructive to habitat would not occur and closure of ways to vehicle traffic would minimize wildlife harrassment.

Neither the crucial deer winter range nor the deer yearlong range within the WSA is significant enough to require special management at this time. Therefore, the 7,000 acres of deer winter range would remain in a good condition and the 8,600 acres of deer yearlong range would remain in an unknown condition as no wildlife improvements are proposed in the WSA.

Lands:

Corridor segment MM-NN (see RMP Resource Protection Corridor Map) would not be identified or designated. Therefore there would be no impacts.

MIDRANGE AND PREFERRED ALTERNATIVES

Minerals:

Impacts would be similar to those of the Resource Protection Alternative with the following exception.

Approximately 2,250 acres of good potential for phosphates would not be in the wilderness area boundary; a reduction of 14 percent from the Resource Protection Alternative. About 16,600 acres leased for oil and gas would be outside the wilderness area; a reduction of about 3000 acres or 11 percent.

Woodland Products:

Impacts are the same as the Resource Protection Alternative.

Domestic Livestock:

Impacts would be similar to those of the Resource Protection Alternative with the following exception.

Motorized access for managing livestock on 3,517 acres would be enhanced as six miles of ways, not be in the wilderness area boundary, could be used to manage livestock. This means that only about two additional hours of labor per year would be needed in the Spruce Allotment to manage livestock by non-motorized means. Future range improvement projects (i.e. seedings) could potentially be implemented on these 3,517 acres with fewer restrictions than in a wilderness area.

Recreation:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Motorized access would be enhanced as 6 miles of ways outside the wilderness area could be used by recreationists. Approximately 3,517 acres would remain open for ORV use while 37,573 acres would be closed with designation. Approximately 96 percent of the resource area would remain open for ORV use.

Wilderness:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Under this alternative wilderness values would be maintained on 37,573 acres and lost on 3,517 acres over the long-term (see manageability section, Criterion No. 2).

Cultural Resources:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Site total projections indicate the presence of about 575 open aboriginal, 10 rock shelters, and 35 historic sites within the wilderness area.

Watershed:

Impacts would be similar to those of the Resource Protection Alternative except that 3,517 acres of watershed would not receive the added protection of wilderness designation.

Wildlife:

Impacts would be the same as those of the Resource Protection Alternative.

Lands:

Corridor segment MM-NN (see RMP Midrange & Preferred Corridor Map) would be narrowed so as not to extend south into the wilderness area. This is an adverse impact on the corridor.

RESOURCE PRODUCTION ALTERNATIVE

Minerals:

There would be no adverse impacts to minerals as all mineral and energy exploration and development would be managed under existing applicable laws and regulations governing such activities on the public lands as the entire WSA is recommended usuitable under this alternative.

Woodland Products:

There would be no adverse impacts to woodland products as these resources would continue to be utilized based on sustained yield management. No woodland product harvest would be foregone.

Domestic Livestock:

Range improvement proposals would continue to be planned, analyzed through an environmental assessment, and implemented, throughout the resource area. There would be no adverse impacts to domestic livestock.

Recreation:

Approximately 99 percent of the resource area, including the South Pequop WSA would remain open for motor vehicle use. Current recreation use within the WSA would continue and may increase over the long-term. The result would be the establishment of new vehicle routes over the long-term. Opportunities for primitive and semi-primitive non-motorized recreation would be reduced.

Wilderness:

In the short and long terms, several activities would affect the area's wilderness values. Vegetative conversion could affect the east bench areas, woodland product harvest could intensify and extend into now natural areas and roads associated with these activities as well as recreation could affect naturalness and opportunities for solitude. The combined effect of these activities would create adverse impacts to the wilderness resource in the short and long terms. Eventually, wilderness values could expect to be lost on the majority of the 41,090 acre WSA.

Cultural Resources:

Management and protection of cultural resources would continue to be guided by all of the applicable laws affecting these resources. An indirect adverse effect of this alternative is that cultural resources would not be afforded the added long-term resource protection provided by wilderness designation.

Watershed:

Proposed activities would continue to be handled on a case-by-case basis to protect watersheds from excessive erosion. An indirect adverse effect of this alternative is that watersheds would not be afforded the long-term resource protection provided by wilderness designation.

Wildlife:

An adverse effect of this alternative is that wildlife habitat would not be afforded the long-term resource protection provided by wilderness designation. Due to potential mineral and energy exploration and development, as well as an increase in off-road vehicle use. About 7,000 acres of deer yearlong and 8,600 acres of deer winter range would be expectd to decline over the long term.

Lands:

Corridor segment MM-NN (see RMP Resource Production Corridor Map) would not be narrowed. Therefore, there would be no impact to the corridor.

Standard No. 3: Impacts of Non-designation on Wilderness Values (and Other Resources).

NO ACTION (NO WILDERNESS) ALTERNATIVE

Other than wilderness, no new designation for the area is anticipated. The WSA forms a portion of the Spruce/Pequop Wild Horse Herd Management Area. Livestock grazing, hunting and woodland product harvest occurs primarilyu along the cherry-stemmed roads and ways.

In the event of non-designation, the WSA's wilderness characteristics would probably be affected by mineral exploration and extraction, range improvements, the harvesting of woodland products and ORV use. Wilderness characteristics would probably be lost (in varying degrees) throughout the entire study area, as most of it is either accessible or potentially accessible by mechanical means.

The impacts for all resources are the same for the No Action Alternative as they were for the Resource Production Alternative.

Standard No. 4: Public Comment

Comments received throughout the initial and intensive wilderness inventories and associated protest periods included those that supported WSA classification because of the outstanding quality of the area as well as those that disagreed. The latter mentioned the area as being roaded, the area's oil and gas and mineral potential, and that the area lacked outstanding characteristics. One individual commented that ways had historically been used and maintained by mechanical means (up to 1974) for livestock operations. Protests were received from five individuals or agencies. These centered on the use of cherry-stemmed road boundaries and criticism of BLM wilderness personnel.

Comments received during the RMP scoping process were generally from those either opposing or supporting wilderness designation of the WSA. One faction expressed concern for withdrawl of the area from mineral entry, exploration and development and felt that taking the area out of production will hamper America's greatness. The other group mentioned that the Elko District designated very few WSAs in comparison to other districts and that it was, therefore, particularly important for these areas be included in wilderness recommendations.

Standard No.5: Local, Social and Economic Effects

The South Pequop WSA is utilized by three operators for livestock grazing. Even though a very small percentage of their businesses are based economically on the lands within the WSA, the social aspect of the ranching way of life is very important to these ranchers and Elko County as a whole.

The opportunity for an individual or a company to prospect, locate minerals, and/or explore for oil and gas is also held in great regard by the residents of Elko County. Therefore, many local people philosophically disagree with wilderness designation because it would, in most cases, restrict or preclude such actions.

The local economy is based to a large degree on mining of hard rock minerals especially gold and barite. The discovery of these, manganese or other minerals with economic value in the WSA could have a significant beneficial economic impact upon the county. However, such an impact, and conversely the loss of such a discovery through wilderness designation, is a potential impact at this time and considered to be of low probability.

Using a $10.00 value, the user day benefits per year from the South Pequop WSA

in the future without designation would be estimated at $3,000 whereas with designation they would be about $10,000. The expenditures, income and employment associated with these benefits are insignificant to the local economy.

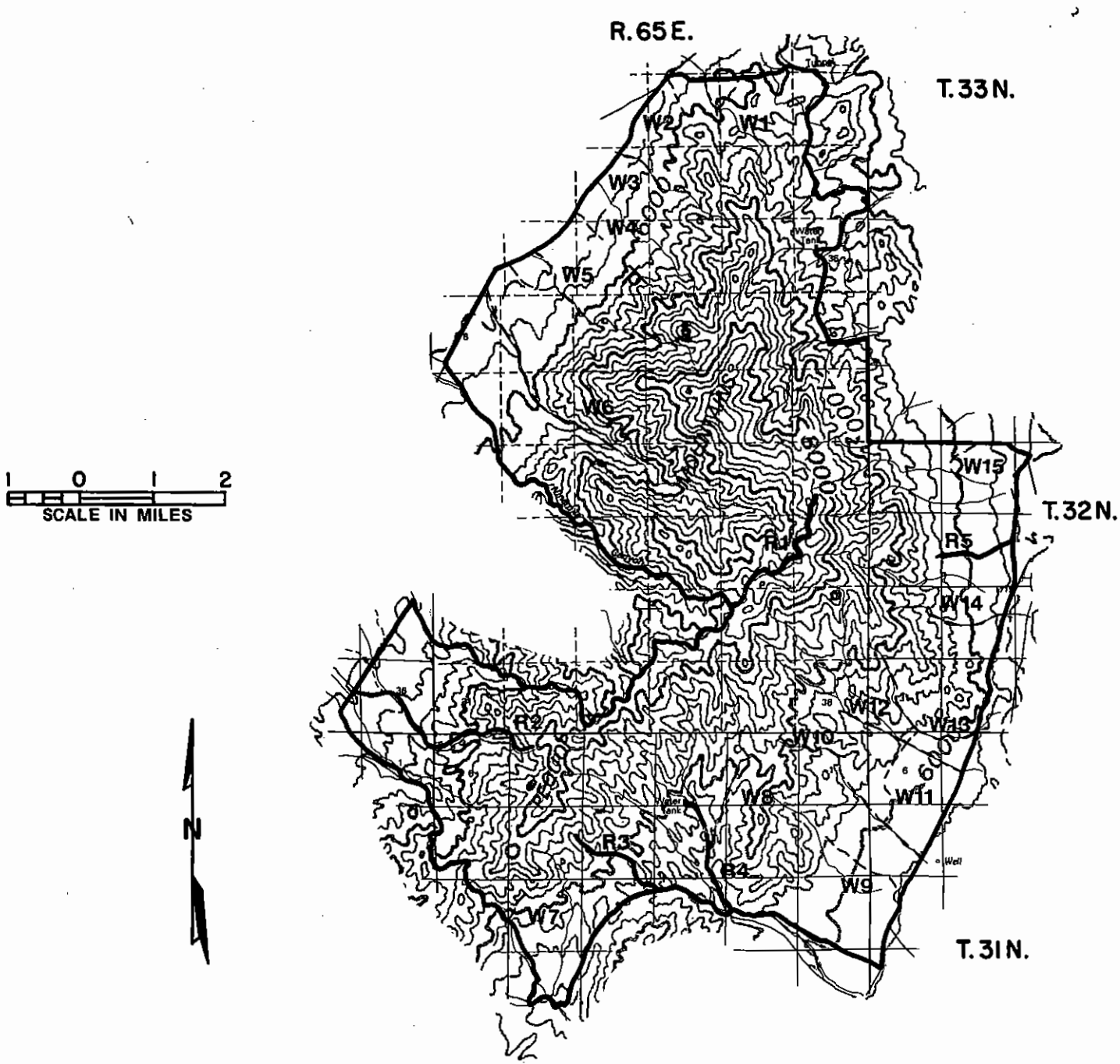
Standard No. 6: Consistency with Other Plans

Wilderness designation is consistent with the FLPMA, the Nevada Statewide Comprehensive Outdoor Recreation Plan (SCORP) dated August 6, 1982, and the General Plan for Elko County dated June 1971. For example the SCORP says that the State of Nevada should:

1. Preserve a representative cross section of Nevada's roadless, undeveloped areas in wilderness; and

2. Offer positive support to federal agencies charged with recommending areas for inclusion in the National Wilderness Preservation System.

SOUTH PEQUOP WSA MAPS

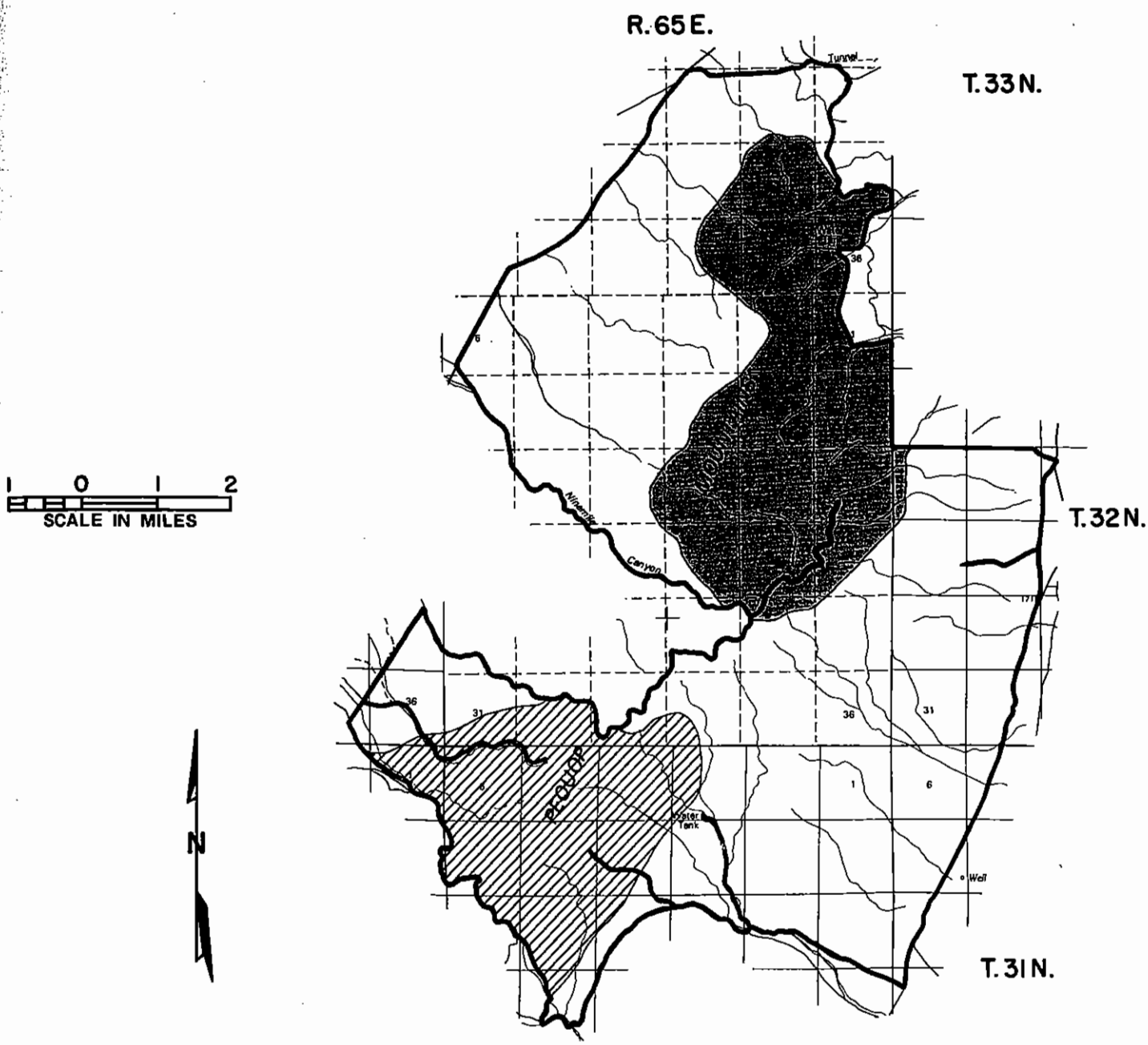


NO HIGH EROSION POTENTIAL WATERSHED

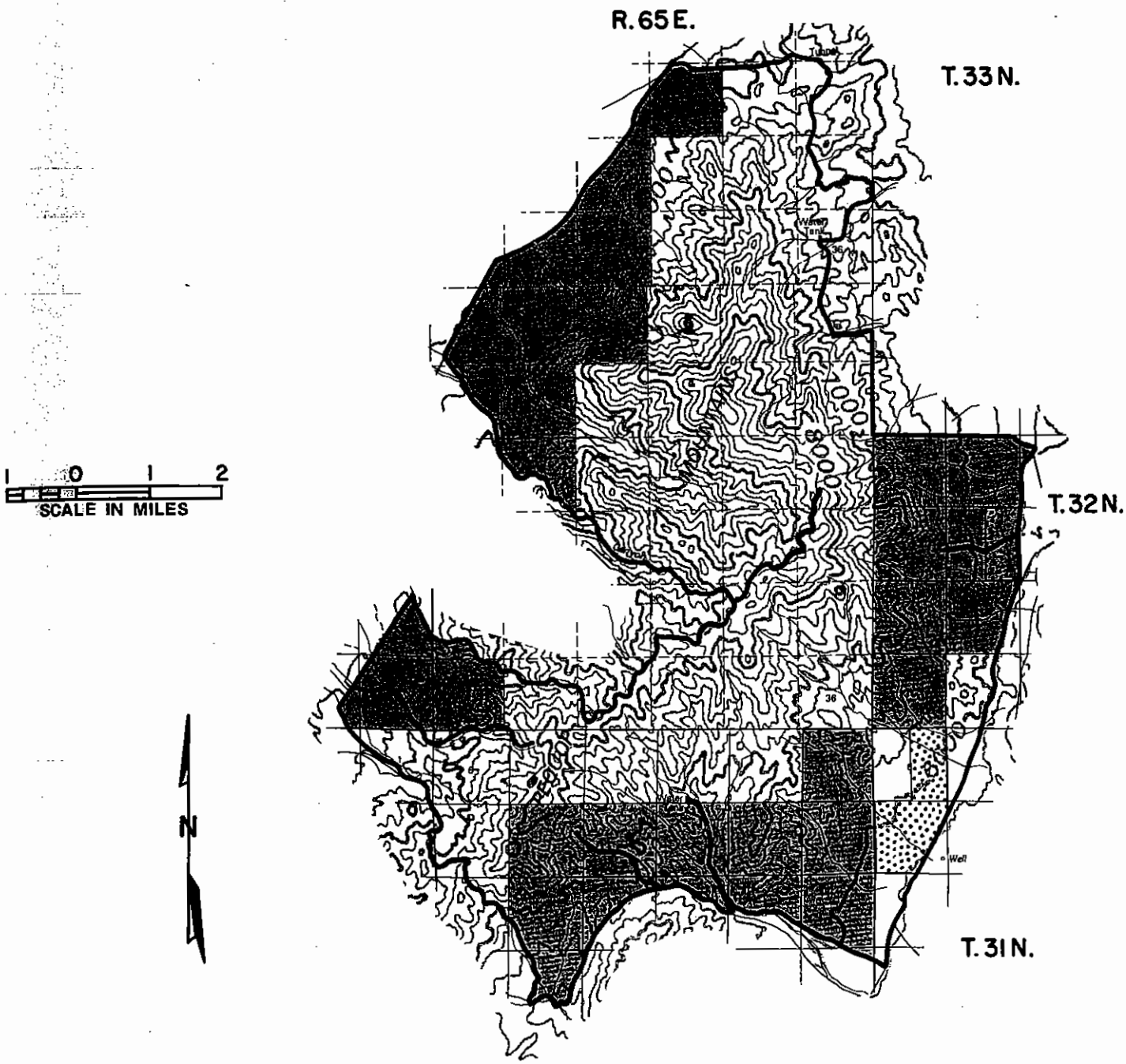
EXISTING RANGE FACILITIES
WELL

ROAD
WAY

DOMESTIC LIVESTOCK & WATERSHED
SOUTH PEQUOP NV-010-035
MAP-11



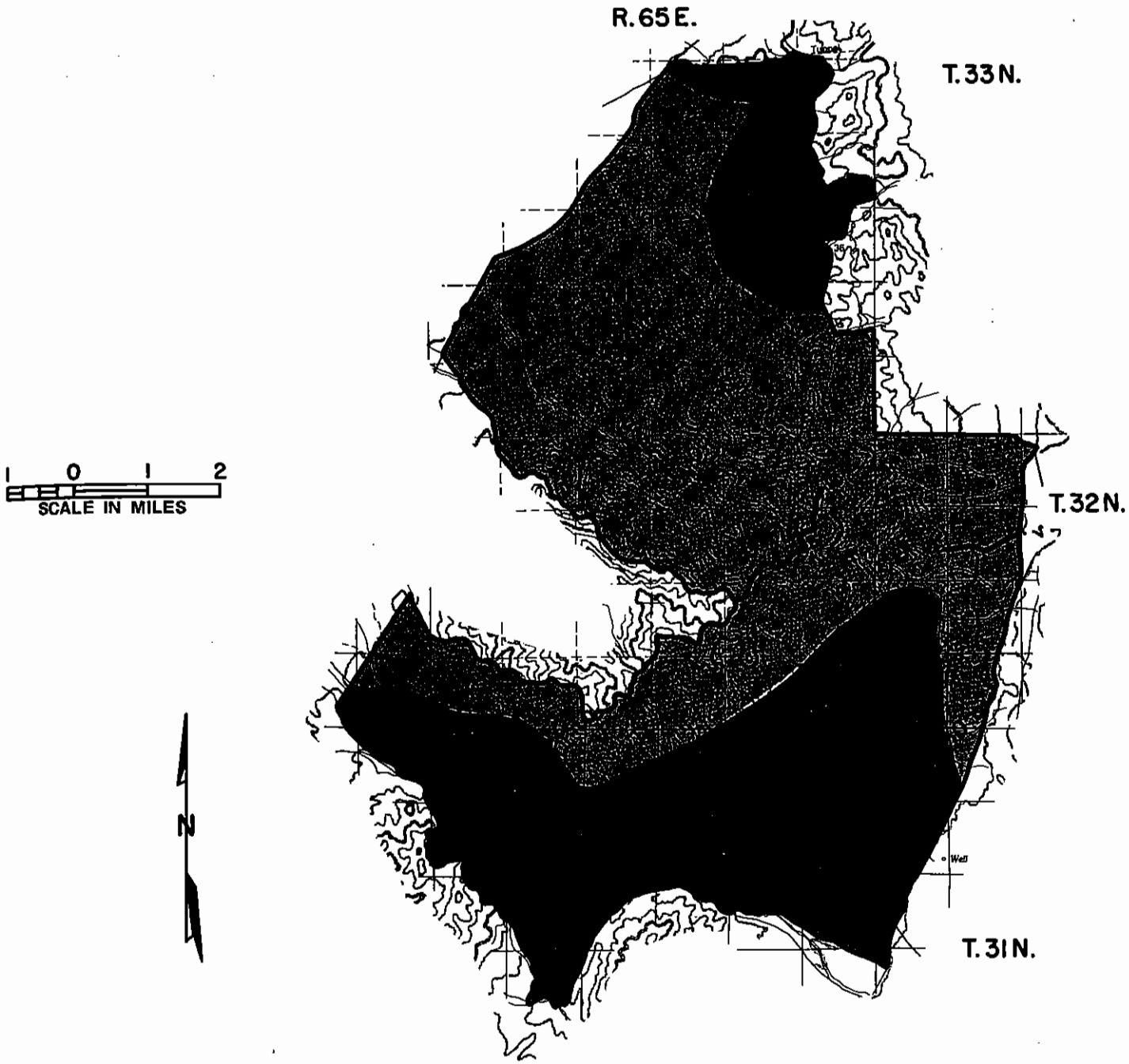
WILDLIFE-BIG GAME HABITATS
SOUTH PEQUOP NV-010-035
MAP-12



MINING CLAIMS & MINERAL LEASES

SOUTH PEQUOP NV-010-035

MAP-13

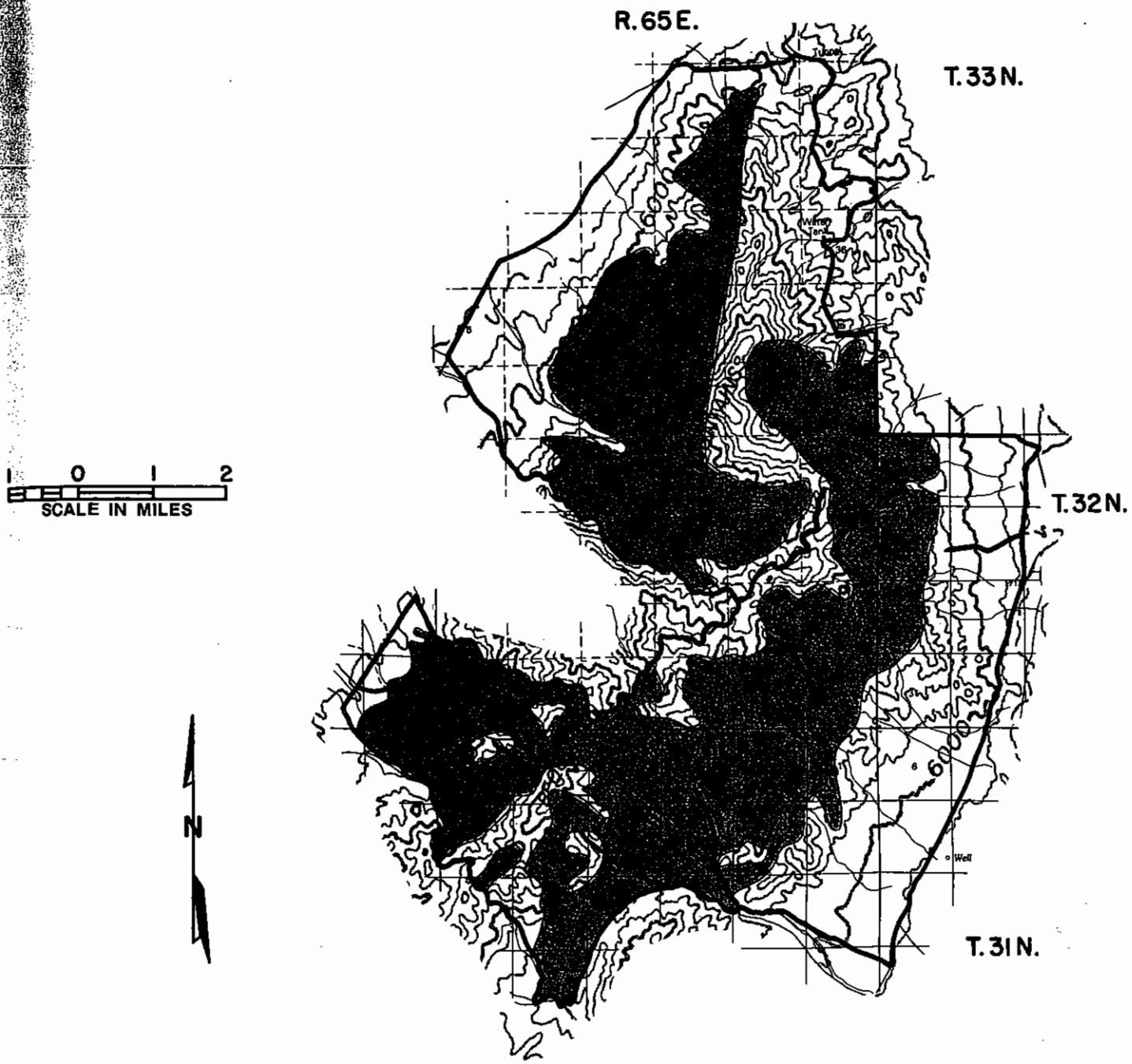


CLASS 1 LOW POTENTIAL

CLASS 2 GOOD POTENTIAL

M METALLIC & NONMETALLIC MINERALS EXCEPT FOR LIMESTONE
P PHOSPHATES
OG OIL AND GAS
G GEOTHERMAL RESOURCES

MINERAL POTENTIAL
SOUTH PEQUOP NV-010-035
MAP-14



FORESTED

WOODLAND
SOUTH PEQUOP NV-010-035
MAP-15

BAD LANDS WSA

The Bad Lands WSA is located approximately 65 miles northeast of Elko, Nevada and 25 miles southwest of Jackpot, Nevada (see location Map, Wells RMP) in the O'Neil Basin. The WSA consists of rough ridges and cliffs of volcanic origin, disected by Salmon Falls Creek. Uses of the area are primarily livestock grazing and recreation.

Table 21 shows the acres of the Bad Lands WSA recommended as preliminarily suitable and non-suitable for wilderness designation by alternative.

Table 21

Bad Lands WSA

	Resource Protection	Midrange & Preferred	Resource Production	No Action
Suitable Acres	9,426	8,415	-0-	-0-
Non-suitable Acres	-0-	1,011	9,426	9,426
% WSA Suitable	100	89.3	-0-	-0-
% Wells RA Suitable	0.22	0.20	-0-	-0-

Criterion No. 1: Evaluation of Wilderness Values

Wilderness value i.e., naturalness, outstanding opportunities for solitude and primitive and unconfined recreation, and special features would be maintained on approximately 8,415 acres and lost on approximately 1,011 acres over time (see Criterion No. 2 Manageability) with wilderness designation under the Midrange and Preferred Alternatives.

Component No. 1: Quality of the Area's Mandatory Wilderness Characteristics

A. Naturalness

The 9,426 acre WSA contains two reservoirs (earthen mounds approximately 15 feet x 5 feet x 5 feet); a 103 acre created wheatgrass seeding; 3 miles of ways; 1 1/2 miles of bladed fenceline and 1 1/2 miles of phoneline. All of these impacts, with the exception of the phoneline, are the result of livestock management both inside and outside of the WSA. The ways are utilized by recreationists and livestock operators. There are no cherry-stemmed roads present within the WSA (see Map 16). These impacts are separated by large distances and are substantially unnoticeable in the WSA.

Some items missed during the intensive inventory are:

1) Approximately 75 acres between the eastern border road and a bladed fenceline; 2) Approximately 306 acres between the phoneline and the southern border road; and 3) Approximately 103 acres of seeding in the extreme northwest portion of the WSA. The first two are recommended unsuitable because of size and the latter becaue it lacks naturalness. These areas total 484 acres.

B. Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation

1. Solitude

The 9,426 acre WSA is smaller than the majority of existing wilderness areas. However, it is larger than the BLM administered Aravipa WSA in Arizona which has been administratively endorsed for inclusion in the National Wilderness Preservation System. The BLM Lands WSA is generally circular and uniform, with the northwest portion oblong in shape and measuring about 5 miles by 2 1/2 miles.

Salmon Falls Creek trends southeasterly through the lower one-third of the WSA. The WSA contains approximately eight river miles and is enclosed by steep canyon walls. Elevation of the creek is about 5,700 feet and the canyon has vertical relief of 250 feet. The river canyon is approximately 1,000 acres in size and contains 10 adjoining side canyons totalling 1,900 acres.

The two largest adjoining side canyons are Scott and Monkey Creek. Scott Creek drainage is V-shaped and approximately 5 miles in length. Its canyon trends northwest away from the river about 2 miles and then veers northeast. Scott Creek drainage is located in the central to north-central portion of the unit and is surrounded by rugged volcanic hills which offer outstanding natural screening. Monkey Creek drainage is V-shaped, sinuous, and approximately 6 miles in length. Its canyon trends north from the river about 2 miles and then veers northeast. Monkey Creek is located 1 1/2 miles southeast of Scott Creek. Steep volcanic hills surround the meandering canyon and offer outstanding natural screening throughout.

The remaining eight side canyons are primarily U-shaped and range from 1/2 to 2 miles in length. Rugged volcanic hills and sloping mesas abut the canyons and also offer outstanding natural screening.

The majority of the unit is sparsely vegetated with low growing vegetation. Some scattered groupings of big sagebrush occur in intermittent drainages such as Scott and Monkey Creeks. The main canyon and lower portions of adjacent side canyons are densely vegetated with a variety of plants ranging from golden currant and willow to choke cherry and snowberry. Ferns, penstomen, and several other plant species thrive in these cooler, shaded canyons. Riparian willow, chokecherry, and snowberry reach heights above 10 feet and provide excellent vegetative cover and screening. In many areas, high sagebrush attain heights of six feet and also provide good screening.

The ability of the user to find a seculded spot within the unit is considered excellent due to the many different areas which provide screening and solitude. The main canyon's sinuousity, rugged side canyons, and rocky outcrops all provide excellent solitude. Dense riparian vegetation in the main and lower portions of adjoining side canyons also provide excellent screening. Sparsely vegetated mesas generally provide little screening or solitude.

Only a few sights or sounds occuring outside the WSA exist. Traces of mining operations, visible from two to five miles east of the WSA slightly diminish the benefits of wilderness designation to the user. A ranch and its associated equipment can be seen and heard from approximately one-half mile away in the extreme northwest portion of the WSA. These sights and sounds diminish the benefits of wildrness designation to the user. A total of about 630 acres of the WSA are unmanageable for these and other reasons, such as odd configuration and naturalness (seeding). An additional 381 acres along the boundary of the WSA are also unmanageable (see Manageabiltiy Section).

2. Primitive and Unconfined Types of Recreation

Activities available in the WSA include backpacking/camping, hiking, horseback riding, hunting, wildlife observation, sightseeing/photography, kayaking and stream fishing.

Backpacking/camping: Several canyons provide good areas for camping with Salmon Falls, Scott and Monkey Creek Canyons providing the best resources available for these activities. The ridgelines and drainages, terminating at Salmon Falls Creek Canyon, offer exceptional backpacking as does Salmon Falls Creek Canyon itself. In following the canyons one encounters various vegetative environments ranging from dense riparian vegetation along the river and rocky side canyons to scattered areas of low sagebrush on the ridges and big sagebrush in upper drainages. Parties would primarily camp along Salmon Falls Creek. Generally, a trip of about two days would be required to enjoy the diversity of the unit. Salmon Falls Creek serves as a water source, however, the water quality for human consumption is probably low and should be chemically treated to prevent possible illness.

Hiking: The WSA provides excellent hiking as game trails exist throughout. The canyons, and rocky outcrops provide scenic attractions. Also of interest to the hiker are numerous grottos and cliffs above Salmon Falls Creek Canyon.

Horseback Riding: Most riding would take place in canyons adjoining Salmon Falls Creek or along ridgelines and in portions of the main canyon. The availability of water enhances opportunities for horseback riding. The duration for riding would be short because of the size of the WSA's relatively small size.

Hunting: The WSA contains good opportunities for hunting mule deer and chukar partridge. Table 22 displays deer hunting information for hunting management unit 074 which includes the Bad Lands WSA.

Table 22

Mule Deer Hunter Days (General Season)

Hunting Unit	1981	1980	1979	1978	1977
Management Unit 074 (includes Bad Lands WSA)	98(a) / 416(b)	111 / 473	101 / 397	82 / 339	66 / 189

(a) = Number of hunters
(b) = Days spent hunting.

Source: Nevada Department of Wildlife (NDOW), 1982

Sightseeing/Photography: Excellent scenery can be found in and around Salmon Falls Creek. Rugged rock outcrops and cliffs coupled with the meandering stream and its riparian vegetation serve as outstanding photographic subjects. Wildlife in the WSA, such as chukar, cougar, bobcats, river otter and raptors, also provide excellent opportunities for observation and/or photography. Several archaeological sites in the WSA offer opportunities for sightseeing and photography.

Kayaking/Canoeing: Opportunities for kayaking are moderate and canoeing are fair. During high flow, small rapids and tight turns afford some challenge and adventure to the kayaker. The stream is about Class I or II for floatboating. Canoeing is difficult due to the sinuousity of the stream and its dense riparian habitat.

Stream Fishing: The eight mile stretch of Salmon Falls Creek through the Bad Lands offers excellent opportunities for catching German brown and rainbow trout to four pounds.

Component No. 2: Special Features; Quality of the Area's Optional Wilderness Characteristics

Ecological: The untrampled streamside riparian and aquatic habitats are in fair condition and are considered unique ecological features. The fishery through the WSA offers about the best opportunities for stream fishing in Elko County. The ecosystem of the WSA appears to be suitable for reintroduction of California Bighorn Sheep. This potential transplant site is listed as fourth priority in the state of Nevada by the NDOW. The WSA also contains a diversity in flora and fauna. Table 23 is a listing of the grasses, forbs, and shrubs known to exist in the area while Table 24 lists the fauna.

Geological: Tertiary rhyolitic lava flows and pyroclastic rocks have been deeply incised to form the rugged topography of the Bad Lands WSA. Most of the lava flows consist of dense blue to brown-gray rock which weathers reddish-brown. Less common are white beds of soft volcanic ash which have been eroded to form the pinacles and spires typical of Bad Lands topography. The volcanic rocks are part of the Jarbidge Rhyolite which is wide spread throughout northern Nevada and southern Idaho. Steep canyon walls with numerous cliffs often descend vertically into the entrenched meandering Salmon Falls Creek. Numerous boulders have fallen into the braided channel. Sandy point bars form many beaches along the river.

The WSA also contains several grottos and small rock shelters which offer opportunities for exploration as well as provide shelter from the elements (i.e., sun, rain).

Scenic Value: From the rim of Salmon Falls Creek Canyon or its adjacent hills and mesas one can see the peaks of the Jarbidge Wilderness Area to the west. An individual in the WSA also has the opportunity to view Salmon Falls Creek Canyon from three different perspectives: 1) looking up over 200+ feet from the canyon floor; 2) from various elevations in the canyon above the stream; and 3) looking down into the canyon from rims overlooking the creek. All three perspectives vary greatly and offer excellent opportunities to view the characteristic scenery of the Bad Lands WSA.

Archaeological: Because of the great expense involved only about one percent of the Wells RA lands have been inventoried for archaeological resources. The site inventory data available was used for making statistical predictions of archaeological site totals projected for the WSA. The projections indicate the presence of about 180 open aboriginal, 40 rock shelters, and 30 historic sites within the WSA.

Little is known of prehistoric inhabitat's of the area as the detailed studies and excavations required to obtain such information have not been undertaken. The earliest occupants of this area were probably big game hunters who exploited the now extinct megafauna such as mammoth, giant bison, and camels at the end of the Pliestocene period.

From CA 10,000-700 years ago hunters and gatherers of the archaic period occupied the area. They subsisted mostly on seeds, roots and rodents suplimented by bighorn sheep, antelope and deer. The material culture of this period was relatively poor compared to other portions of the country because of their semi-nomadic life style, but what materials they did have were finely adapted to successfully exploiting the harsh environment of the region. Hallmarks of the archaic period are the milling stone and well made basketary.

After 1300 A.D. the area was occupied by the Kuumputuka, a western Shoshone group. Their culture was similar to that of the Archaic peoples. The history of the area is unknown. Euro-American use of the area was probably limited to short term activities such as hunting, trapping, and livestock tending.

Bad Lands WSA

Table 23

FLORA

Grasses	Forbs	Shrubs
Sandbergs Bluegrass	Prickly Phlox	Chokecherry
Squirreltail	Buckwheat	Snowberry
Idaho Fescue	Lupine	Prickly Pear Cactus
Bluebunch Wheatgrass	Wild Onion	Low Sage
Cheatgrass	Arrow-leaf Balsamroot	Big Sage
Indian Rice Grass	Hawks Beard	Rabbitbrush
Reed Grass	Asters	Spiny Hopsage
Needle-and-thread Grass	Bastard Toadflax	Winterfat
Great Basin Wild Rye	Indian Paintbrush	Horsebrush
Nevada Bluegrass	Western Yarrow	Roses
		Bitterbrush
		Golden Currant

Bad Lands WSA

Table 24

FAUNA

Birds	Fish	Mammals
Goshawk	German Brown Trout	Pronghorn Antelope
Chukar	Rainbow Trout	Beaver
Mallard	Northern Squaw Fish	Coyote
Golden Eagle		Mountain Lion
Great Blue Heron		Bobcat
Canyon Wren		Mule Deer
American Dipper		River Otter
Grey-headed Junco		Badger
Belted Kingfisher		Least Chipmunk
Song Sparrow		Yellow-bellied Marmot
Mountain Chickadee		
Black-billed Magpie		
Desert Cottontail		
Turkey Vulture		
Sage Grouse		
Great Horned Owl		
Yellow-breasted Chat		
Common Merganser		
Canada Goose		
Common Snipe		
Marsh Hawk		
Gray Partridge		
American Robin		
White-crowned Sparrow		

Scientific and Educational Values: Opportunities exist to study the streamside riparian, aquatic and wildlife habitats of the inner canyon. The variety of fauna and flora supported by these habitats greatly enhances the visitor's experience and offers opportunities for scientific and educational study.

Component No. 3: Multiple Resource Benefits: The Benefits to Other Multiple Resource Values and Uses Which Wilderness Designation of the Area Could Ensure

A. Values that already exist:

Wilderness designation would ensure that the naturalness, outstanding opportunities for solitude and primitive and unconfined recreation, special features and other resource values in the WSA would be maintained or enhanced over time.

Wilderness designation would generally protect the archaeological resources in the WSA. Because of vehicular restrictions, access to cultural resource sites would become more difficult. This would reduce vandalism and allow archaeological sites to retain their integrity for a longer period of time.

Watersheds in the WSA would be protected from future deterioration if the area were designated wilderness. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment for mineral exploration and development would be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases in sediment production.

Approximately 6,650 acres of antelope summer range are in a poor condition and 9,426 acres of historic bighorn sheep habitat are in a good condition (see Map 17).

Wilderness designation could allow construction of guzzlers for wildlife, as well as other wildlife projects which could be beneficial in reintroducing bighorn sheep into the Bad Lands. Restricted development would be especially beneficial to lambing of bighorn sheep if they are reintroduced into the area.

Development of roads, powerlines, gravel pits and other noticeable intrusions would not be allowed in the area, thereby, protecting the pristine visual quality of the Bad Lands WSA; one of the most scenic areas in the Wells RA.

B. Values that do not now exist:

Wilderness designation would enhance the possibility of the NDOW reintroducing bighorn sheep into the area. NDOW has considered this action for a long time but the agency wants to be relatively sure of the sheep's protection from man before the reintroduction is made. On a statewide basis, the Badlands area is listed as fourth priority for reintroduction.

C. Benefits to areas outside the Wilderness Study Area:

The visual quality of the WSA as viewed from outside the area is outstanding and would be protected by wilderness designation. The visual

contrast between the meandering Salmon Falls Creek and the rugged volcanic cliffs and spires is exceptional.

Component No. 4: Diversity in the National Wilderness Preservation System

Factor No. 1: Expanding the diversity of the natural systems and features, as represented by ecosystems and landforms.

The entire 9,426 acre WSA is within the Sagebrush - Steppe Ecosystem as represented by the Bailey-Kuchler Ecosystems of the United States. Part A of Table 25 shows that portions of two existing wilderness areas (6,483 acres in the Jarbidge Wilderness Area, Nevada), are partially comprised of the Sagebrush-Steppe ecosystem. Part B of this table displays areas of this ecosystem which have been administratively endorsed as wilderness and are pending before Congress. Part C displays study areas in the Sagebrush-Steppe ecosystem nationwide which have potential for future designation as wilderness (Further Study Areas).

Factor No. 2: Assessing the opportunities for solitude or primitive recreation within a days driving time (five hours) of major population centers.

The Bad Lands WSA is about 4 1/2 to 5 hours driving time from the Boise, Idaho SMSA. Table 26 shows the acreage of existing wilderness areas (Part A), administratively endorsed areas (Part B), and WSAs within five hours of this SMSA (Part C).

Factor No. 3: Balancing the geographic distribution of wilderness areas.

The Jarbidge Wilderness Area, located about 1 to 1 1/2 hours driving time west of the Bad Lands WSA is the only designated wilderness area in Nevada. It contains 64,830 acres or .09 percent of the public land in Nevada. Currently there are about 8 million acres in Nevada under consiideration for wilderness designation that are either administratively endorsed as suitable or slated for further study. This represents approximately 7.5 percent of the federally administered lands in Nevada.

Criterion No. 2: Manageability

The Bad Lands WSA is a solid block of public land totalling 9,426 acres. There are no private inholdings, state lands, or right-of-ways within its borders. No mining claims exist in the WSA. One oil and gas lease of 2,325 acres is located in northern portion of the WSA (see Map 18). No discoveries of ore have been reported and no drilling has taken place within or adjacent to the WSA.

Three ways exist in the WSA totalling 3 miles (see Map 16). The border road and ways are used for vehicular access primarily by recreationists and livestock operators. All roads would remain open for all publics to provide continued access. The three ways (W-1, 2, and 3) would be closed to vehicular traffic if the area is designated wilderness.

For several reasons the northwestern 630 acres are unmanageable as a wilderness area. The areas odd configuration coupled with its proximity to Twin Meadows Ranch and the 103 acre crested wheatgrass seeding in T. 45 N., R. 62 E. 9, NW1/4NW1/4 adversely impact both the naturalness and feeling of solitude one would experience in the area. The previously discussed bladed fenceline is proposed to form a portion of the eastern border of the wilderness area while the phoneline and its associated road would form its southern border in the Midrange and Preferred Alternatives. These boundary adjustments would be manageable and delete approximately 381 additional acres from the wilderness area (a total of 1,011 acres of recommended unsuitable due to manageability problems).

The IMP Guidelines allow for planning and development of various projects in the WSAs, (i.e., fences, prescribed burns) including the use of motorized equipment, if the non-impairment criteria are met. However, development of projects in a wilderness area would be restricted by the Wilderness Management Policy to non-mechanical means.

The boundaries of the 8,415 acre portion of the WSA (Mid-Range and Preferred Alternatives) are identifiable and manageable. Admittedly, some degradation of wilderness values would occur from illegal nonconforming uses. However, the area can generally be managed to maintain its wilderness character over the long term.

QUALITY STANDARDS

Standard No. 1: Energy and Mineral Resource Values

Mineral potential classification definitions are shown in the Bluebell WSA analysis on page 20.

Mineral potential has been estimated on the basis of the Wells MRI, company responses to a request for input, field work, available literature, and the contract GEM assessment of WSAs.

Table 27 shows the potential for metallic and non-metallic minerals, phosphates, oil and gas, and geothermal resources in the Bad Lands WSA. Map 19 displays the location of these resources.

The Bad Lands WSA is almost entirely underlain by Tertiary felsic volcanic extrusives of which rhyolite to dacite flows and domes are dominant. Lesser amounts of volcanoclastic rocks consisting of tuffaceous sandstone and siltstone also occur. A small amount of Permain through Missippian age limestone may occur along the eastern border of the WSA.

The Contact Mining District is located about two miles east of the WSA. The district has produced minor amounts of copper, and very small amounts of tungsten, molybdemum, gold, silver, and lead. Mineralization in the district occurs along contacts between Mesozoic granites and Missippian - Permain limestones and shales.

Table 25

ECOSYSTEM/LAND FORM REPRESENTATION

A. Ecosystem/Landform

EXISTING REPRESENTATIONS IN STATUTORY WILDERNESS

No.	Name	BLM AREAS			OTHER AGENCY AREAS		
		No Areas	Areas	Agency	No.	Acres	State
3130-49	Sagebrush Steppe	None	None	USFS	1	6,483	NV
				USFS	1	28,062	CA

B. Ecosystem/Landform

AREAS ADMINISTRATIVELY ENDORSED

No.	Name	BLM AREAS			OTHER AGENCY AREAS		
		No. Areas	Areas	Agency	No.	Acres	State
3130-49	Sagebrush Steppe	None	None	USFS	1	400	CA
				USFW	1	341,500	NV
				NWR	1	15,500	OR

C. Ecosystem/Landform

POTENTIAL WILDERNESS AREAS (Other Study Areas)

No.	Name	BLM WSAs			OTHER AGENCY AREAS		
		State	No. Areas	Acres	Agency	State	Acres
3130-49	Sagebrush Steppe	NV	31	1,063,034	USFS	NV	7,768
		OR	66	2,025,229		OR	9,955
		ID	33	776,907		ID	5,562
		CA	8	381,715		CA	11,285

Table 26

Proximity to Population Centers

A. Statutory Wilderness Within One Days Travel Time of Identified Population Centers

SMSA	State	BLM No.	Acres	Other State	Agency No.	Acres
Boise		None		ID	4	2,573,280
				OR	4	503,443
				NV	1	64,830

B. Administratively Endorsed Areas Within One Days Travel Time of Identified Population Centers

SMSA	State	BLM No.	Acres	Other State	Agency No.	Acres
Boise		None		ID	8	1,489,050
				OR	3	81,551

C. Potential Wilderness Areas Within One Days Travel Time of Identified Population Centers

SMSA	State	BLM No.	Acres	Other State	Agency No.	Acres
Boise	ID	67	1,710,707	ID	11	640,924
	NV	5	87,740	NV	1	7,768
	OR	47	1,596,945	OR	17	588,358

Table 27

Bad Lands Mineral Potential Acres

	High (3)	Medium (2)	Low (1)
Minerals (M)	-0-	500	8,926
Phosphates (P)	-0-	-0-	9,426
Oil & Gas (OG)	-0-	-0-	9,426
Geothermal (G)	-0-	-0-	9,426

Source: GEM Assessment, February, 1983.

Some oil and gas leasing has occurred in the WSA (see map 18) and leasing is considered speculative. No seismic oil and gas exploration has taken place near the WSA. The presence of a mesozaic granitic pluton near the WSA and paucity of Tertiary lake bed sediments underlying the WSA are major negative criteria for oil and gas accumulations. No geothermal occurences or major fault zones have been observed in the WSA, hence, the low potential for geothermal resources.

CONCLUSION:

1. There is no active mining or mining claims in the WSA.
2. Minor exploration may have taken place, but no mineral development has occurred within the WSA and no ore deposits or mineral occurrences are known to exist.
3. About 500 acres of the WSA has good potential for base metals. The remainder of the WSA has low potential for all energy and mineral resources.

Standard No. 2: Impacts on Other Resources (Including Wilderness) by Alternatives)

RESOURCE PROTECTION (ALL WILDERNESS) ALTERNATIVE

Minerals:

With wilderness designation the area would be segregated from all forms of mineral entry. This would preclude drilling in the WSA and the potential discovery and development of mineral resources would be foregone (except for valid existing rights). This is considered an insignificant impact to the resource area as the 500 acres with good mineral potential are only .05 percent of the land in the Wells RA with good or high mineral potential (Wells RMP).

Since there are no mining claims in the WSA there is no impact to mining claims.

Oil and gas leases cover about 25 percent of the WSA (2325 acres), however, the potential for oil and gas is low and precluding leases from development is considered an insignificant impact.

DOMESTIC LIVESTOCK:

Table 28 displays livestock grazing information in the WSA.

Table 28

Livestock Grazing Use in the Bad Lands WSA

Allotment	Number of Permittees	Authorized Season of Use in Allotment	Actual Period of Use in WSA
Buckhorn 2/	1	4/15-10/31	Winter & Spring
O'Neil 1/	1	4/15-10/20	Rest Rotation 3/
Hubbard Vineyard 1/	1	6/15-11/1	Summer & Fall
Salmon River 1/	1	4/16-10/16	Spring & Summer

1/ All current use is by cattle
2/ All current use is by cattle, sheep and horses
3/ = Rest Rotation:

1st Year - Spring/Summer
2nd Year - Summer/Fall
3rd Year - Rest
4th Year - Repeat Cycle

Source : Livestock Grazing Case Files: Wells Resource Area (January, 1983).

The animals generally graze in the intermittent drainages of Scott and Monkey Creeks and are managed by vehicle along the border road. Livestock operators occassionally utilize horses within the interior portions of the Bad Lands.

With designation, livestock operators would generally be required to manage their livestock on horseback or foot while leaving their vehicles on the border road. This limitation should not adversely impact the four permittees with allotments inside the boundaries of the wilderness area.

The limiting factor for increasing the amount of AUMs in the WSA is the rocky steep terrain (and its associated shallows soils) and the lack of water outside Salmon Falls Creek Canyon. Large amounts of forage nearby but outside the WSA are available to livestock for their use. Also, there is little local or regional economic dependence upon livestock grazing in the Bad Lands WSA. Therefore, there are no significant livestock management values foregone or adversely affected as a result of wilderness designation.

Recreation:

If designated, the area would represent about 0.22 percent of the resource area and would be closed to ORV use. This would slightly reduce opportunities to enjoy motorized recreational activities while enhancing opportunities for primitive and unconfined recreation activities. Neither of these impacts are considered significant. A large portion of the Bad Lands is inaccessible to motor vehicles as the rugged topography physically limits access.

Ways W-2 and 3 are utilizied by hunters and fishermen for recreational access to canyon areas. The closure of the ways to the general public would slightly reduce the number of hunters and fishermen in the area. However, this reduction would be very small, especially for fishing, as a large amount of current recreational activity occurs at the Burnt Meadows (privately owned land adjacent to the southeast portion of the WSA) area outside the WSA. Those who did hunt or fish would experience an increased quality experience because of fewer people encountered in the WSA. Having to walk or horseback into the Bad Lands to hunt or fish could either be an inconvenience or an enjoyable experience depending on the preference of the recreationist. Therefore, there are no hunting or fishing values foregone or adversely affected as a result of wilderness designation.

Wilderness:

In this alternative the wilderness resource would receive maximum protection, which would ensure the wilderness integrity of most of the area. It would not, however, prevent adverse impacts on 1011 acres which are expected to lose their wilderness character over time. Protection of this area by wilderness designation is less necessary than in the Bluebell and Goshute Peak WSAs However, beneficial impacts would be significant if the area is designated wilderness. Very few resource conflicts exist within this WSA.

Cultural Resources:

Wilderness designation would protect the archaeological resources in the WSA. Because of vehicular restrictions, access to cultural resource sites would become more difficult. This would reduce vandalism and allow archaeological sites to retain their integrity for a longer period of time. An estimated 180 open aborignal, 40 rock shelters and 30 historic sites would be protected in this alternative.

Watershed:

All watersheds in the WSA would be protected from future deterioration if the area is designated. Restrictions on surface disturbing activities, such as off-road vehicle use and the use of heavy equipment in mineral exploration and development would be beneficial to these watersheds by maintaining the overall good water quality and soil stability, while preventing potential increases in sediment production.

Wildlife:

In general, big game habitat would be protected by wilderness designation as future developments destructive to habitat would not occur and closure of ways to vehicle traffic would minimize wildlife harrassment.

The 6,650 acres of antelope summer range would remain in a poor condition while the 9,426 acres of historic bighorn sheep range would remain in good condition. With designation, habitat development and improvement projects would probably be implemented in the wilderness area to enhance bighorn sheep habitat. Potential improvements include the construction of guzzlers for wildlife and prescribed burns to enhance bighorn sheep range. Such development would increase the potental for reintroduction of bighorn sheep. Restricted development would also be especially beneficial to lambing of bighorn sheep if they are reintroduced into the area.

Lands:

An unauthorized phoneline, located partially within the WSA's southern boundary would be adversely affected.

MIDRANGE AND PREFERRED ALTERNATIVES

Minerals:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Approximately 100 acres with good mineral potential for base metals would be outside from the wilderness area, reducing the amount of good mineral potential in the wilderness area by 20 percent. Approximately 575 acres leased for oil and gas would be deleted from the wilderness area reducing the amount of acres leased for oil and gas by 25 percent.

Domestic Livestock:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

The 1 1/2 miles of bladed fenceline would form the eastern boundary of the wilderness area. The 103 acre crested-wheat seeding in the northwest portion of the WSA could be maintained as it would be deleted from the wilderness area. Conflicts between wilderness users and livestock operations in the northwest 630 acres of the wilderness area would be eliminated.

Recreation:

Impacts would be the same as those of the Resource Protection Alternative.

Wilderness:

Impacts would be similar to those of the Resource Protection Alternative except that wilderness values would be maintained on 8,415 acres and lost on 1,011 acres over the long-term.

Cultural Resources:

Impacts would be similar to those of the Resource Protection Alternative with the following exceptions.

Site total projections indicate the presence of about 155 open aboriginal, 40 rock shelters and 25 historic sites within the wilderness area.

Watershed:

Impacts would be the same as those of the Resource Protection Alternative.

Wildlife:

Impacts would be the same as those of the Resource Protection Alternative with the following exceptions.

Approximately 6,370 acres of antelope summer range would remain in a poor condition while 8,415 acres of historic bighorn sheep habitat would remain in a good condition.

Lands:

There would be no adverse impacts to lands under this alternative as a right-of-way could be granted for the unauthorized phoneline which partially forms the southern border of the WSA.

RESOURCE PRODUCTION ALTERNATIVE:

Minerals:

There would be no adverse impacts to minerals under the this alternative as all mineral and energy exploration and development would be managed under existing applicable laws and regulations governing such activities on the public lands.

Domestic Livestock:

Range improvement projects would continue to be planned, analyzed through environmental assessments, and implemented throughout the resource area. There would be no adverse impacts to domestic livestock.

Recreation:

Approximately 99 percent of the resource area, including the Bad Lands WSA would remain open for motor vehicle use. Current recreation use within the WSA would continue and may increase over the long-term, resulting in the establishment of new vehicle routes.

Wilderness:

Wilderness values would be lost, in varying degrees, over the short and long-terms due to the lack of protection wilderness designation could afford. Anticipated impacts expected to degrade the wilderness values of the Bad Lands WSA include mineral exploration and extraction, range improvements, roads development and other surface disturbing activities. Only about 873 acres of the most rugged inaccessable areas along Salmon Falls Creek Canyon would retain their wilderness character over the long-term.

Cultrual Resources:

Management and protection of cultural resources would continue to be guided by all of the applicable laws affecting these resources. An adverse effect of this alternative is that cultural resources would not be afforded the added long-term resource protection provided by wilderness designation.

Watershed:

Proposed activities would continue to be handled on a case-by-case basis to protect watersheds from excessive erosion. An adverse effect of this alternative is that watersheds would not be afforded the long-term resource protection provided by wilderness designation.

Wildlife:

An adverse effect of this alternative is that wildlife habitat would not be afforded either the short or long-term resource protection provided by wilderness designation.

Due to potential mineral and energy exploration and development, as well as increased off-road vehicle use and other surface disturbing activities, about 6,650 acres of antelope summer range and 9,426 acres of historic bighorn sheep yearlong range would be expected to decline in condition over the long-term. The potential for reintroducing bighorn sheep would essentially be lost under this alternative.

Lands:

There would be no impacts to lands under this alternative.

Standard No. 3: Impacts of Nondesignation on Wilderness Values (and Other Resources).

NO ACTION (NO WILDERNESS) ALTERNATIVE

Other than wilderness, no formal designation for the area is anticipated. However, it is expected that the area would be managed so as to protect its exceptional scenic value.

In the event of non-designation, the wilderness characteristics of the Bad Lands WSA could be affected by mineral exploration and extraction, range improvements, road construction and unrestricted ORV use. The significance of these impacts cannot be predicted accurately as most are only potential impacts.

Only the most rugged and inaccessible portions of the Bad Lands are expected to retain their wilderness character over time. An estimated 873 acres along Salmon Falls Creek would maintain its naturalness over the long-term. However, opportunities for solitude or primitive and unconfined recreation would probably be lacking in such a small area.

The impacts on all resources are the same as for the No Ation Alternatives they are for the Resource Production Alternative.

Standard No. 4: Public Comment

Comments received throughout the initial and intensive wilderness inventory and associated protest periods included those that supported WSA classification because of the outstanding quality of the area as well as those that disagreed who mentioned the WSA as roaded, it possessed good oil and gas and mineral potential, and that it lacked outstanding wilderness characteristics. Protests were received from four individuals or agencies. These centered around the use of cherry-stemmed road boundaries and criticism of BLM wilderness personnel.

Comments received during the RMP scoping process were generally from those either opposing or supporting wilderness designation of the WSA. One faction expressed concern for withdrawl of the area from mineral entry, exploration and development and felt that taking the area out of production will hamper America's greatness. The other group mentioned that the Elko District designated very few WSAs in comparison to other districts and that it was, therefore, important these areas be included in wilderness recommendations.

Standard No. 5: Local, Social and Economic Effects

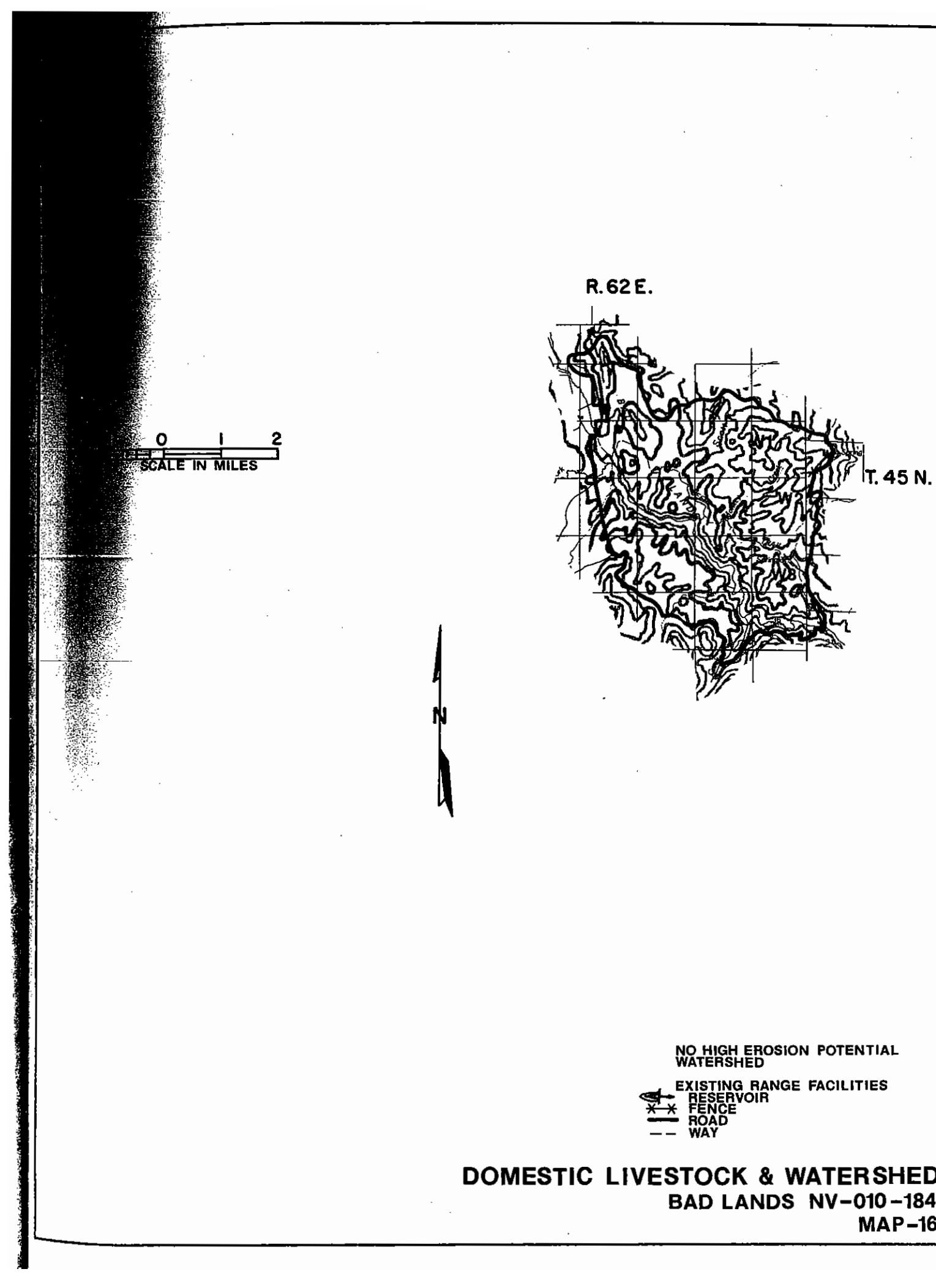
The Bad Lands WSA is utilized to a small degree by four operators for livestock grazing. Even though a very small percentage of their businesses are based economically on the lands within the WSA, the social aspect of the ranching way of life is very important to these ranchers and Elko County as a whole. Wilderness designation would not preclude ranching nor would it introduce increased costs to those operators.

The opportunity for an individual or a company to prospect, locate minerals, and/or explore for oil and gas is also held in great regard by the residents of Elko County. Therefore, many local people philosophically disagree with wilderness designation because it would, in most cases, restrict or preclude such actions.

The local economy is based to a large degree on mining of hard rock minerals, expecially gold and barite. The discovery of these, manganese or other minerals with economic value in the WSA could have a significant beneficial economic impact upon the county. However, such an impact, and conversely the loss of such a discovery through wilderness designation, is a potential impact which is considered to be of low probability at this time.

Using a $10.00 value, the user day benefits per year from the Bad Lands WSA in the future without wilderness designation would be estimated at $5,000 whereas with designation they would be about $20,000. The expenditures, income and employment associated with these benefits are insignificant to the local economy.

BAD LANDS
WSA MAPS



DOMESTIC LIVESTOCK & WATERSHED

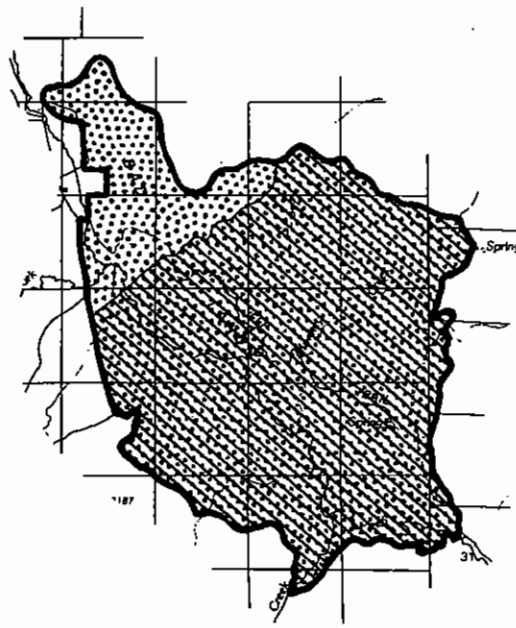
BAD LANDS NV-010-184

MAP-16

1 2

IN MILES

R. 62 E.



N

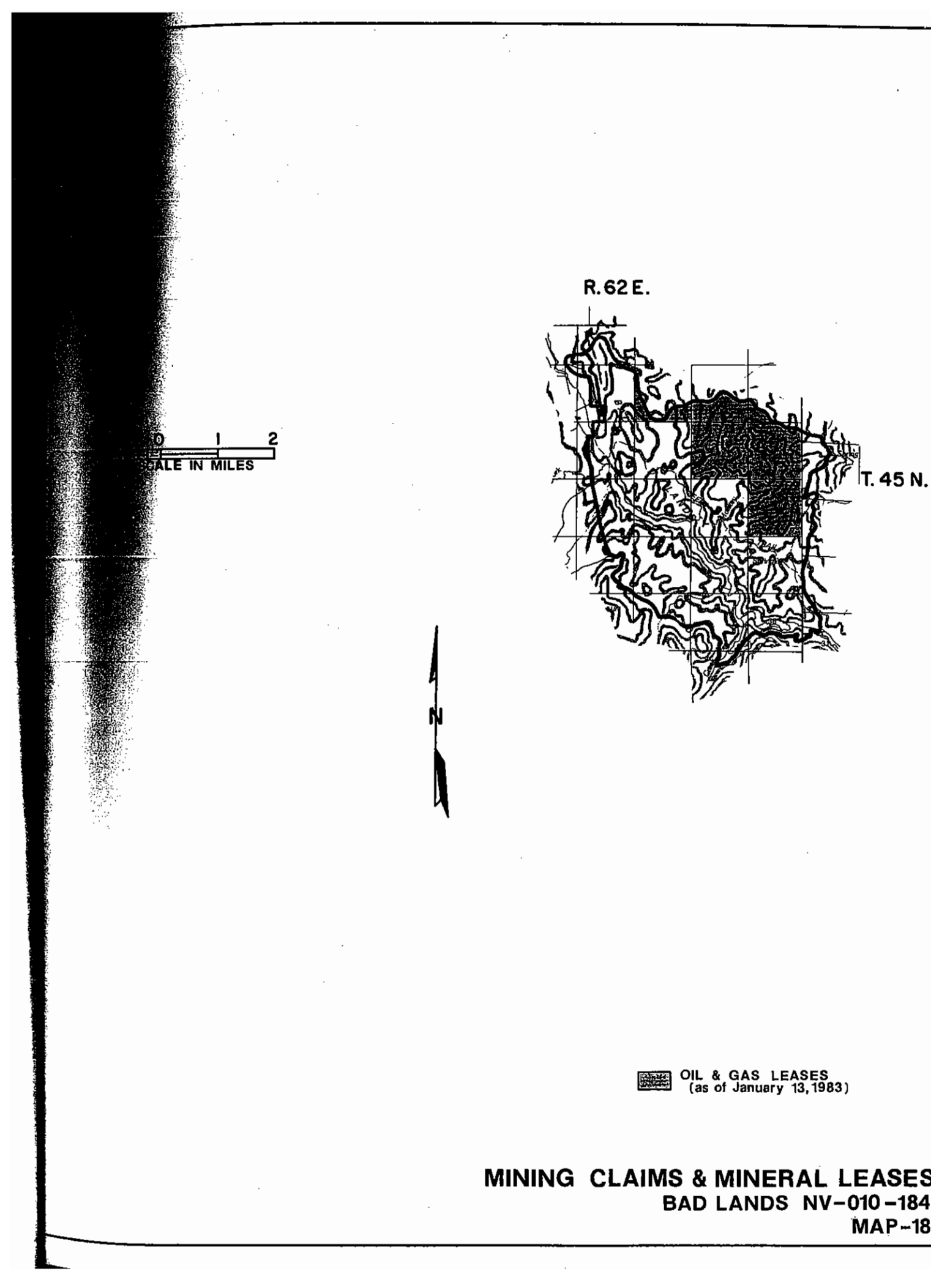
ANTELOPE SUMMER

HISTORIC BIGHORN

WILDLIFE–BIG GAME HABITATS

BAD LANDS NV–010–184

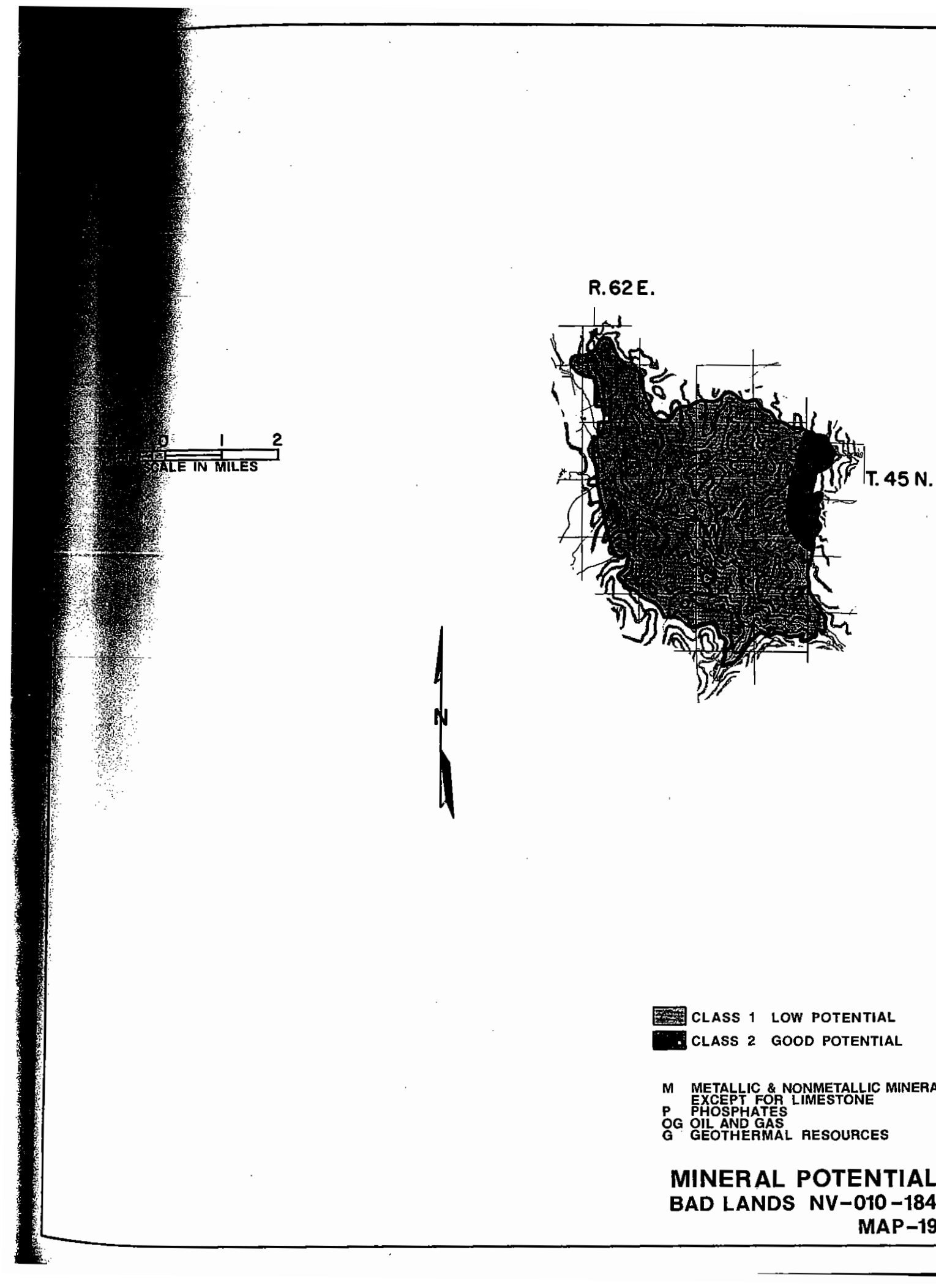
MAP–17



MINING CLAIMS & MINERAL LEASES

BAD LANDS NV-010-184

MAP-18


R. 62 E.
T. 45 N.
0 1 2
SCALE IN MILES
N
CLASS 1 LOW POTENTIAL
CLASS 2 GOOD POTENTIAL
M METALLIC & NONMETALLIC MINERALS EXCEPT FOR LIMESTONE
P PHOSPHATES
OG OIL AND GAS
G GEOTHERMAL RESOURCES
MINERAL POTENTIAL
BAD LANDS NV-010-184
MAP-19